RETURN ON ASSETS – TRUST LAND MANAGEMENT DIVISION MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

I. **Introduction.**

The FY 2005 Return on Assets Report for the Trust Land Management Division contains the earnings from resource management and the estimated asset value of all resources for all of the trust beneficiaries. It also includes the Return on Assets for Classified Forest Lands Report required by the Montana State Legislature. The 5.1 million acres of trust land constitutes the second largest real estate holding in Montana. The information published in this report should be useful in understanding the financial performance of the Trust Land Management Division and the associated resource programs.

The report is comprised of two components. The first examines all revenue sources on the same basis and time frame using a method based on current year information and techniques appropriate to the resource. The second analyzes the return to Classified Forest Lands using the method prescribed by MCA 77-1-223 through MCA 77-1-225.

No significant changes in base data such as acreage realignments are needed for FY 2005. As in previous reports, the data is most accurate at the total trust and land office levels. The trust by land office data estimates are improved and it will continue to be refined as better quality data that requires fewer estimates becomes available.

In summary, the Real Estate Management Bureau's (REMB) Programmatic Plan was approved by the Land Board in FY 2005. The plan gave the REMB Board approval to expand its real estate management activities. For the Forest Management (FMB) and the Mineral Management Bureaus (MMB), increased prices have resulted in increased resource production with a resulting substantial increase in revenue. While price increases for agricultural products were modest, improved weather conditions raised yields, which in turn, increased the revenue generated by the Agriculture and Grazing Management Bureau (AGMB). Overall the four bureaus generated more current year gross revenue in FY 2005 than in any prior year. After adjusting for price levels, FY 2005 ranks as one of the best revenue earning years in the trusts' history.

Methodology. The methodology used for this report is identical to that used in prior reports unless otherwise identified. Changes to methodology are generally specific to a particular estimate, are noted when used, and not of a broad nature.

Note: Tables do not always balance, particularly when rounded numbers are being used.

II Production and Prices.

This section discusses the production generated and prices received by the different bureaus during the fiscal year and where relevant, it discusses broader market issues and prices to provide an explanation of issues the particular bureau is facing.

Commodity prices were up in FY 2005, particularly for the MMB where oil and gas prices increased substantially and for the FMB where stumpage prices continued at the same high level as last half of FY 2004. The effect of the increases in prices as well as in production on most trust lands substantially increased returns to the trusts both in the form of distributable revenue and in the increase valuation of trust assets (Table 1). The total distributable revenue generated by the trusts broad market increase is the largest in trust history.

Responding to the current world energy supply and demand situation, the production of nearly all energy minerals increased in FY 2005. FY 2005 saw the MMB's coalbed methane activity continue to develop. Production of coalbed methane was up by 231.4 percent and the number of producing wells increased from 56 to 74. Production increased for oil, gas, and coal as well.

In FY 2005, the 53.2 million board foot sustained yield harvest level in the forest management program was implemented for the full fiscal year. In addition to the increase in sustained yield, the price "run-up" begun in FY 2004 continued through most of FY 2005. This was the highest price level for timber since the mid 1990s. Timber revenue is higher than any of the previous four years (Figure 6). Higher FY 2005 prices have also encouraged production of timber on existing and new sales.

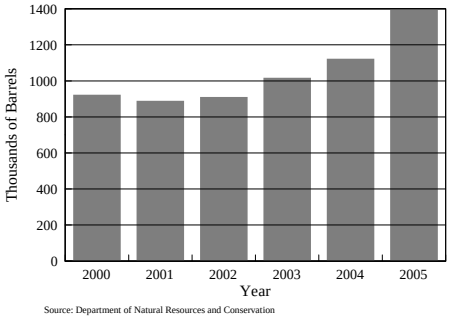
Agriculture and grazing revenue was up in FY 2005. Better prices for agricultural commodities and better production due primarily to improved moisture increased the revenue lessees earned on trust lands. Gross revenues are at the highest point for both grazing and agricultural leases for the period FY 2001-FY 2005 If moisture levels continue at their current "normal" levels, agriculture and grazing revenues should remain strong, particularly if land holdings are improved through the land banking program.

A. Production

- Oil & gas

Figure 1a shows the production of oil from trust lands for the last six years. Oil from state trust lands is extracted by private companies who base production levels on market price, demand, production costs, the quality of the oil produced, and long-term

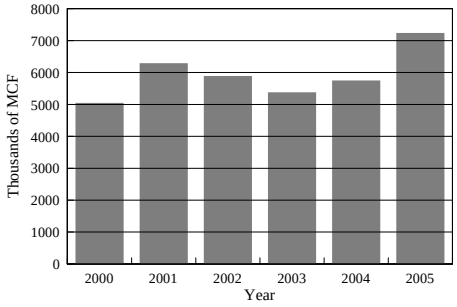
Figure 1a
Montana Department of Natural Resources and Conservation
Oil Production on State Trust Lands 2000 - 2005



Source: Department of Natural Resources and Conservation

contractual obligations. Oil production has increased in the last three years in response to higher prices resulting from an increase in demand by consumers. The increase in production has increased the return on assets for the MMB.

Figure 1b
Montana Department of Natural Resources and Conservation
Natural Gas Production on State Trust Lands 2000 - 2005

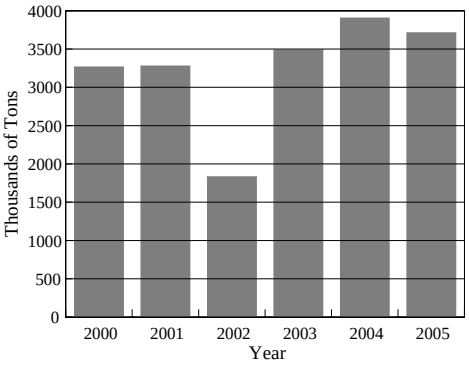


Source: Montana Department of Natural Resources and Conservation

Figure 1b shows the production of natural gas in million cubic feet (MCF) from trust lands for the last six years. The general trend in production has been increasing. FY 2005 was the highest natural gas production year of the six-year period. The general increase in prices has stimulated the continued increase.

- Coal

Figure 1c
Montana Department of Natural Resource and Conservation
Coal Production on State Trust Lands 2000 - 2005



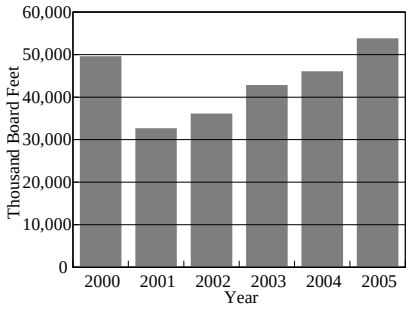
Source: Department of Natural Resources and Conservation

With the exception of FY 2002 and this fiscal year's small decrease, the coal trend is upward. The production of coal in any one year can vary substantially as the mining operations move on and off state leases. This was the primary reason for the low production level in 2002. Some of the coal produced from Montana trust lands contains comparatively high levels of sodium. This makes the coal more difficult to use and reduces its value and marketability.

- Timber

Figure 2a displays the timber harvest from bid sales for FY 2000 to FY 2005. Timber harvests fluctuate year-to-year depending current price, expected future price, episodic events such as fires, and availability of logs from other sources. The harvest for FY 2005 is the highest in the last six years. The low harvest level of FY 2001 is the first year in a five-year period of continually increasing harvests. Harvest levels should remain high in

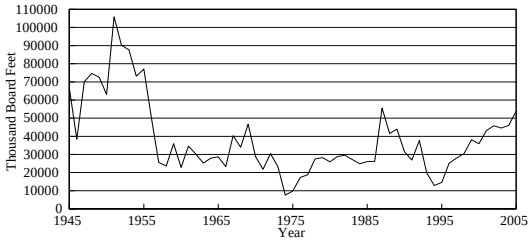
Figure 2a
Montana Deparment of Natural Resources and Conserva
Timber Harvest from Bid Sales



Source: Montana Department of Natural Resources and Conservation

FY 2006 if market prices remain strong. The growth in 2005 was driven by two factors: the increase in sustained yield and the high price paid for lumber.

Figure 2b
Montana Department of Natural Resources and Conservation
Annual harvest 1945 to 2005



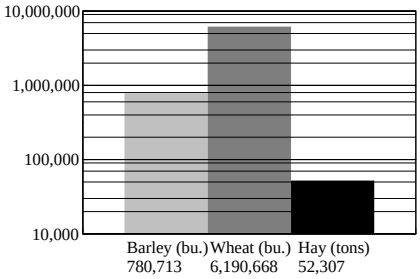
Source: Montana Department of Natural Resources and Conservation

Figure 2b shows the historic bid sales harvest level on state lands from 1945 to the present. Current harvest levels appear to be within the "normal" range since 1958. Before that time, harvest levels were much higher.

- Agriculture and Grazing

Agriculture production for FY 2005 is shown in Figure 3. The most important crop for Montana trust land lessees was wheat, which had a production level nearly nine times the amount of the next two highest agriculture commodities. Production levels are important since they impact the amount of revenue received by DNRC from lessees. FY 2005 agricultural commodity production was up by 25 to 34 percent over FY 2004 levels.

Figure 3
Montana Department of Natural Resources and Conservation
Production of Major Crops on State Lands - FY 2005

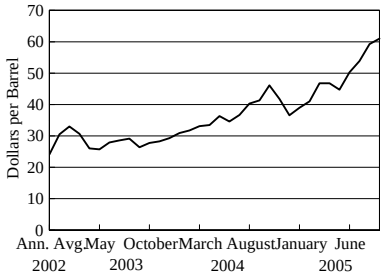


Source: Montana Department of Natural Resources and Conservation

B. Prices

Nearly all of the products from trust lands go into the production of another good or asset. Oil and gas power machinery, timber is made into lumber used to build houses, etc. The demand for nearly all trust land products is the result of activities in other markets. The price and demand for these market goods play a major role in determining the prices received for trust land outputs. A second major factor influencing the price is the competition for DNRC goods from other producers of the same or similar goods. In nearly all of the markets in which trust land goods are sold, the bureaus' outputs constitute a small fraction of the total production of the goods supplied to the market. This means the bureaus are limited in what they can do to influence the prices they receive;

Figure O&G 1
Montana Department of Natural Resources and Conservation
Refiner Acquisition Price - Crude Oil

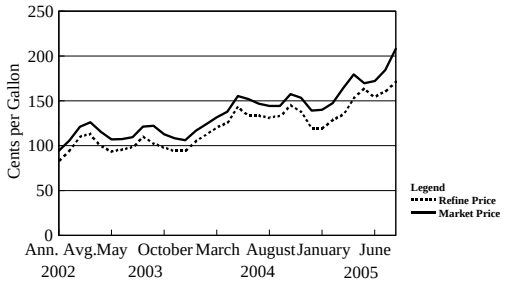


Source: Energy Information Administration, Petroleum Marketing Monthly November,2005

i.e., they are "price takers." In order to indicate the effect of these influences, price graphs include prices of some other factors likely to influence the prices received by the different bureaus for their products.

Of particular interest this year has been the effect of increases in oil and gas prices on the MMB. These price increases occurred as a result of some little-understood factors outside of the Department. Figure O&G 1 shows the average refiner acquisition price for the year 2002 and monthly changes for the 2½ years that follow. Figure O&G 2 shows the price of petroleum at the refinery and the market price of petroleum. Clearly, these two prices move together. A comparison of the price movements in crude oil with the price movements in refinery and market prices shows these prices move in a similar pattern. If the prices are compared statistically, they yield a correlation coefficient of .95.[1] This implies that retail prices are being driven by the crude oil price and not just responding to changes in the demand for refined petroleum products. Another important point is that crude oil prices have increased consistently for most of the last three years, whereas refinery prices and petroleum prices have increased primarily from 2004 to 2005. Looking at this data, it is clear that the increase in price is not a direct result of refiners increasing the price of petroleum faster than the cost of their major input, crude oil (crude oil constitutes about 62 percent of the cost of refined petroleum).

Figure O&G 2
Montana Department of Natural Resources and Conservation
Refinery and Market Price for Gasoline



Source: Energy Information Administration, Petroleum Marketing Monthly November,2005

What, then, is driving up the price of crude oil, since crude oil is primarily responsible for the increase in prices at the gas pump? Unfortunately, there is little conclusive research in this area. In a presentation before the Subcommittee on Energy and Resources of the U.S. House of Representatives, John Cook of the U.S. Department of Energy indicated that world demand is increasing, particularly in China and Asia. On the supply side, the world's major suppliers have not expanded production sufficiently to offset the increase in demand. Because there are few substitutes for petroleum in the short run, the effect of this increase in demand has been to cause an increase in the price of crude oil. The exact impact of the Chinese and Asian increase in demand is difficult to measure because they do not supply oil purchase data to world trade organizations.

Under these circumstances, wide fluctuations in the price of petroleum products will likely continue as purchasers move in and out of the market, and the long-

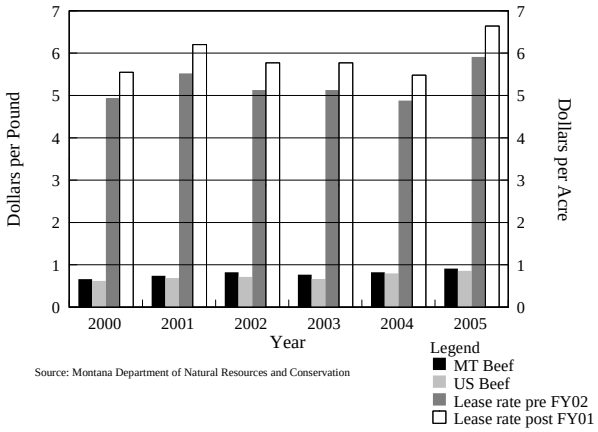
[1] Two variables that are perfectly correlated yield a coefficient of 1, meaning that the variables consistently change in proportion to each other.

term price of oil will continue to increase as demand continues to increase, particularly in developing countries.

- Agriculture and Grazing

In the case of grazing, prices received for leases are directly tied to the price of beef. Figure 3a shows the Montana- and U.S.-led beef prices compared with the lease rates received by the state trust lands. Since acres of land each leased does not vary significantly, revenue from year to year is determined primarily on the basis of lease rates. Lease rates are adjusted based on Montana beef prices, since the two move together. U.S. beef prices follow much the same pattern, except the relationship between U.S. and Montana beef prices changes from year to year. Recently, Montana beef prices have generally been above average U.S. beef prices in recent years.

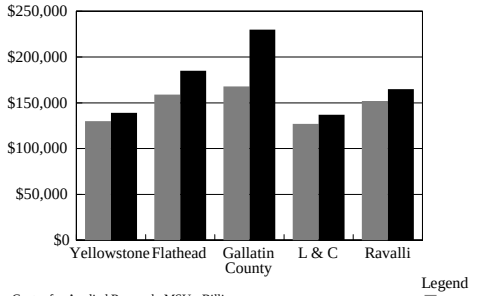
Figure 3a
Montana Department of Natural Resources and Conservation
A Comparison of Beef Prices and Trust Land Lease Rates



Source: Montana Department of Natural Resources and Conservation

Lease revenue for agricultural properties is determined primarily by the return earned by the lessee from crops grown on the property. As shown earlier, yields in FY 2005 were up. Prices for wheat were down slightly in FY 2005, but barley and hay prices were as good or better than in 2004. The overall impact has been to increase agricultural lease revenue slightly in FY 2005. The dependence of the trust on crop production makes it difficult for the AGMB to have a stable income source from agricultural leases. In order to bring some stability to this part of the program, the bureau will request authority in the 2007 Legislature to convert agricultural leases to a cash basis similar to those now offered in the grazing program.

Figure 4a
Montana Deparment of Natural Resources and Conservation
Housing Price Changes for Selected Counties



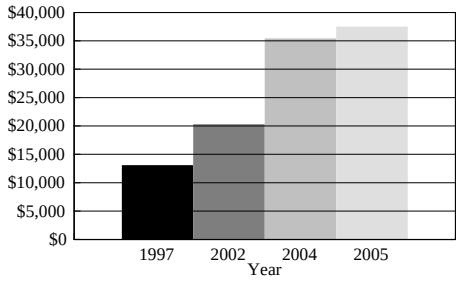
Source: Center for Applied Research, MSU - Billings and Montana DNRC

- Real Estate

In the real estate management program, most revenue is generated from real estate leasing and licenses. Lease rates are not directly tied to the housing market;

they are tied to the appraised property value, which depends on the overall market value for real property.

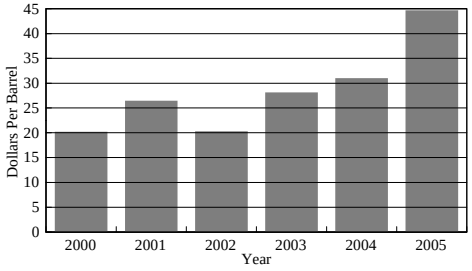
Figure 4b
Montana Department of Natural Resources and Conservation
Average Appraised Value Per Lease



Source: Montana Department of Natural Resources and Conservation

Previously, it was possible to develop a housing price index for Montana using research from Montana State University-Billings. This program is currently being restructured and temporarily does not have complete statewide housing information. New statewide housing information should be available next year, which will allow reconstitution of the index. In place of the index, Figure 4a exhibits selected median housing prices for selected counties based on data supplied by the Center for Applied Research, MSU-Billings. Figure 4b displays the average appraised price for real estate leases in FY 1997 ($13,089), FY 2002 ($20,322), FY 2004 ($35,411), and FY 2005 ($37,522). This increase represents an annual average increase in valuation of 12.4 percent over the nine-year period.

Figure 5a
Montana Department of Natural Resources and Conservation
Prices for Oil Produced on State Trust Lands 2000-2005



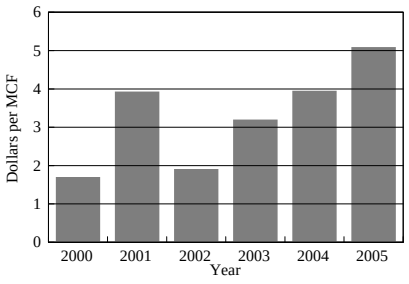
Source: Montana Department of Natural Resources and Conservation

- Oil & Gas

Figure 5a depicts the price received for oil produced on state trust lands since FY 2000. FY 2005 oil prices climbed strongly to $44.69 per barrel, a 44 percent increase over FY 2004 prices. With current world demand and the situation in the Middle East, there is little reason to expect oil prices to retreat to the FY 2001-FY 2003 levels

Figure 5b shows natural gas prices for the period FY 2000 to FY 2005. Prices for natural gas have increased from FY 2002. Prices increased from $3.95 per MCF in FY 2004 to $5.09 Per MCF in FY 2005, a 29 percent increase. Both worldwide and national reserves for natural gas from all sources are quite large. Increased prices for oil may make development of both coal bed

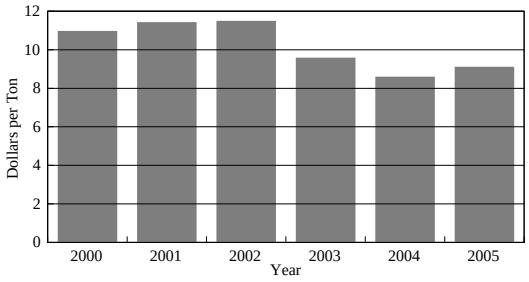
Figure 5b
Montana Department of Natural Resources and Conservation
Prices for Natural Gas Produced on State Trust Lands 2000 - 2005



Source: Montana Department of Natural Resources and Conservation

methane and natural gas reserves more economical. This will ultimately result in increased revenues from trust lands.

Figure 5c
Montana Department of Natural Resources and Conservation
Prices for Coal Produced on State Trust Lands 2000 - 2005



Source: Montana Department of Natural Resources and Conservation

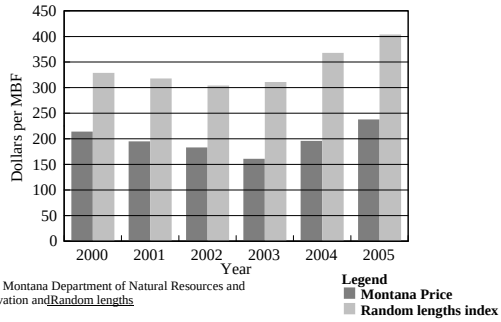
- Coal

Figure 5c illustrates the prices received for coal produced from state lands. The graph indicates that the price received for coal produced on state trust land decreased from FY 2000 to FY 2005. However, in FY 2005, the price increased by about 6 percent nationally. Montana coal prices also increased in 2005. Previously, long-term forecasts were for stable or slightly declining coal prices. With the increase in the cost of other energy alternatives rising in the long term, the price of coal is now also expected to increase over the long term.

-Timber

Figure 6 shows the average stumpage price[2] the state has received for timber harvested on state trust lands from FY 2000-FY 2005, together with the random lengths composite lumber price index. The random lengths index is a wholesale composite index price that reflects both national and regional lumber prices. Both the state stumpage prices and the random lengths prices had been declining until FY 2004 when there was a strong increase which continued into FY 2005. The price increases reflected in both the *Random Lengths* index and the Montana stumpage price are due to several factors: continuing long term growth in housing in the United States; weakening of the U.S. dollar, which effectively lowers the prices paid to foreigners for their timber; tariffs imposed on Canadian wood imports; and the strengthening of several foreign economies, primarily in the Far East. However, prices have eased in recent months, reflecting a weakening demand for timber. The resolution of the tariff against Canadian imports in favor of Canada could also have a significant impact on supply. The recent resolution of the associated lawsuit makes it difficult to see how much the tariff reduction will affect supply. If imports increase significantly, then domestic (Montana) prices are likely to fall.

Figure 6
Montana Deparment of Natural Resources and Conservation
Timber Stumpage Prices on Trust Lands



Source: Montana Department of Natural Resources and Conservation and Random lengths

[2] Does not include funds collected for the Forest Improvement Program.

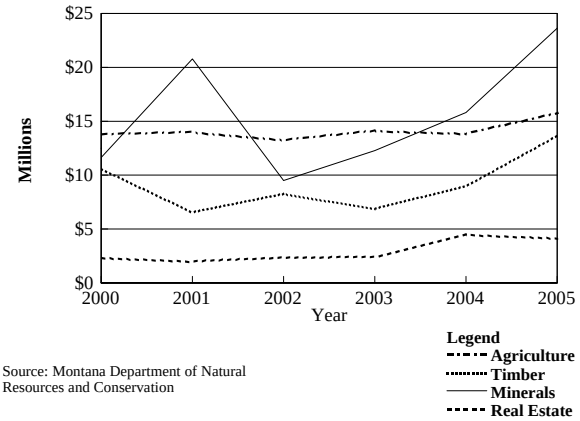
III. REVENUE, EXPENSE, AND ASSET APPRECIATION

Total return includes both net revenue and appreciation. However, it does not represent the best income flow to the trusts. Appreciation in land values cannot be used to fund school expenditures, but is considered part of the total return on an asset. Increased land values contribute to the revenue of the trusts only after they are captured through sale or increased rental or lease rates. Passive and non-market values and benefits affect trust land management activity levels, particularly classified timberlands. To a lesser extent, they affect other land classifications as well. They do not add to the income received for the trust land beneficiaries. This report includes only those activities that return a monetary value to the trusts and does not attempt to quantify non-market values.

A. Revenue

Revenue-generating activities on trust lands includes timber sales, mineral sales and leases, agricultural sales and leases, and real estate sales and leases. Figure 7 shows the contributions from each source for the last six years. On average, minerals generated the largest amount of revenue, followed in order by agriculture, timber and real estate. Gross revenue from minerals increased substantially in FY 2003 to FY 2005 and is the largest revenue producer. Revenue from agriculture and forestry were up significantly and primarily reflect the increase in commodity prices. Timber production continued to increase as a result of the increase in the allowable cut. Agriculture increased as a result of an increase in both prices for beef and higher production on agricultural lands. The decrease in total gross trust real estate revenue is the result of the loss in revenue from a single large lease payment.

Figure 7
Trust Gross Revenue by Source
2000 - 2005



Source: Montana Department of Natural Resources and Conservation

Table 1 presents the information for the last five fiscal years in tabular form. These numbers are presented in the DNRC's Annual Report for each fiscal year[3] except that land sales, trust interest, and "other revenues" are not included. Land sales are shown separately in the table, but are excluded from the return on assets calculation because they represent an exchange of assets, money for land. Revenue includes a small amount of earnings for nontrust

[3] Fiscal year will always mean "state fiscal year," i.e., July through June, and not "federal fiscal year."

land such as Agricultural Experiment Station lands that DNRC manages, but these funds do not contribute to trust earnings. These small amounts are deducted from the analysis of the return on assets for the trusts, but are included in the first three tables for comparison and historical purposes. Land sale earnings are shown separately because they are part of bureau revenues but are excluded from the return on assets analysis because they are deposited directly into the Trust permanent fund. Interest income and other revenues are excluded because they do not represent current earnings from trust resource management.

Table 1
Montana Department of Natural Resources and Conservation
Trust Gross Revenue by Source
FY 2001 - FY2005

Source	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Ag. & Grazing	$14,018,730	$13,279,949	$14,116,247	$13,887,202	$15,793,549
Forest Mgmt.[4]	8,578,175	9,686,844	8,278,792	11,043,525	16,596,191
Minerals Mgmt.	20,777,365	9,501,254	12,282,648	15,810,987	23,641,848
Real Estate	2,008,779	2,302,658	2,367,469	4,528,203	4,121,170
Sub total	$45,383,049	$34,770,705	$37,045,156	$45,269,917	$60,152,758
Land Sales	0	15,954	19,744	2,900	25,797
Total	$45,383,049	$34,786,659	$37,064,900	$45,272,817	$60,178,555

Table 1 represents gross earnings by source; however, the return on assets should represent a net figure, i.e., earnings after expenses are deducted. Table 2 shows the expenses for each program. Forest improvement expenses are kept separate, since they represent funds retained to ensure continuation of long-term forest health and are considered a program investment.

Table 2
Montana Department of Natural Resources and Conservation
Net Expenses by Source
FY 2001 – FY 2005

Source	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Ag. & Grazing	$891,010	$1,182,926	$1,043,273	$1,514,686	$1,636,259
Forest Mgmt.	3,065,345	3,286,469	3,776,429	4,230,626	4,576,621
Minerals Mgmt.	629,930	756,104	971,912	641,074	670,227
Real Estate	1,026,356	1,205,447	1,161,081	1,102,429	1,320,287
Subtotal	$5,612,641	$6,430,946	$6,952,695	$7,488,815	$8,203,394
Forest Improvement	1,981,597	1,404,363	1,363,664	1,579,519	1,732,856
Total	$7,594,238	$7,835,309	$8,316,359	$9,068,334	$9,936,250

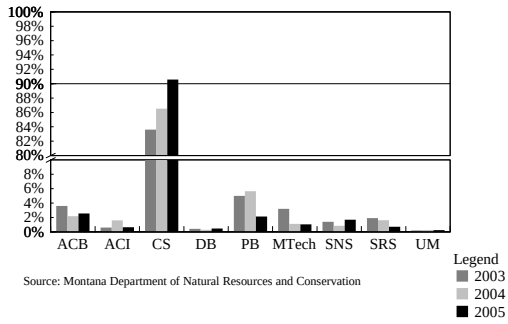
[4] Forest Improvement Funds are included at the gross revenue level to show the relationship to the Annual Report; however, because they are not available for distribution to the trusts, they are subtracted in Table 2 and generally excluded from most other exhibits.

Table 3 shows the net trust fund revenues available for FY 2001 to FY2005. Undistributed Forest Improvement funds for FY 2005, not shown in the table, totaled $1,211,703. The retained FI money is similar to retained earnings in a business where retained earnings are earmarked for future investment.

Table 3
Montana Department of Natural Resources and Conservation
Trust Net Revenue by Source
FY 2001 – FY 2005

Source	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Ag. & Grazing	$13,127,720	$12,097,023	$13,072,974	$12,372,517	$14,157,290
Forest Mgmt.	3,531,233	4,996,012	3,138,699	4,783,274	9,075,011
Minerals Mgmt.	20,147,435	8,745,150	11,310,736	15,169,914	22,971,621
Real Estate	982,423	1,097,211	1,206,388	3,425,774	2,800,883
Total	$37,788,811	$26,935,396	$28,728,797	$35,751,478	$49,004,805

Figure 8
Montana Department of Natural Resources and Conservation
Gross Revenue Distribution by Trust 2003-2005



Source: Montana Department of Natural Resources and Conservation

Figure 8 displays the distribution of revenue by each trust for FY 2003 through FY 2005. The Common Schools Trust receives over four times the revenue from trust land as all of the other trusts combined. In FY 2005, the share going to Common Schools increased, while nearly all the other trusts had small decreases. The Montana State University Second grant (ACB) and the State Normal Schools (SNS) grant also had a small increase in their share of the FY 2005 gross revenue.

Estimated gross revenues by land office and trust are shown in Table 4. Remaining nontrust revenues were deducted, so the table does not reflect revenue for the Agricultural Experiment Station, Forest Improvement, Galen, General Fund, Montana Department of Transportation, or land sales.

Table 4 Montana Department of Natural Resources and Conservation Gross Trust Revenues by Land Office and Trust FY 2005 (Thousands of Dollars)							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$20	$1	$4	$909	$0	$519	$1,454
ACI	80	4	122	133	15	5	359
CS	6,192	11,273	15,671	7,798	6,602	4,007	51,542
DB	60	2	31	149	1	14	257
PB	314	13	89	510	3	282	1,211
MTech	125	2	83	375	1	1	587
SNS	115	4	88	669	1	85	962
SRS	262	7	22	1	10	94	396
UNIV	43	21	62	0	0	1	128
Total	$7,213	$11,328	$16,171	$10,543	$6,633	$5,008	$56,896

In FY 2004, gross trust revenues increased by $13.8 million. All bureaus except Real Estate had increased revenue in FY 2005. The largest increase was in the MMB, where gross revenues increased by $8.0 million accounting for nearly 58 percent of the revenue increase. Both Forest Management and Mineral Management Bureaus increased their revenues by nearly 50 percent.

B. Expenses

The Trust Lands Management Division is allowed to utilize a portion of the trust receipts to cover part of the costs of managing the trust lands. These reduce funds available for distribution. Table 5 shows these costs without FI, prorated on the basis of the Trust Lands Division employee distribution and gross revenue to the trusts.

Table 5 Montana Department of Natural Resources and Conservation Trust Management Expenses by Land Office and Trust FY 2005 (Thousands of Dollars)							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$4	$0	$2	$185	$0	$154	$345
ACI	0	0	0	0	0	0	0
CS	906	597	926	3,016	367	1,348	7,159
DB	7	0	9	24	0	6	46
PB	60	0	59	149	1	67	337
MTech	6	0	8	23	1	0	38
SNS	36	0	40	103	0	38	217
SRS	17	4	8	0	4	27	60
UNIV	1	0	0	0	0	0	2
Total	$1,036	$601	$1,052	$3,500	$374	$1,640	$8,203

C. Net Revenue

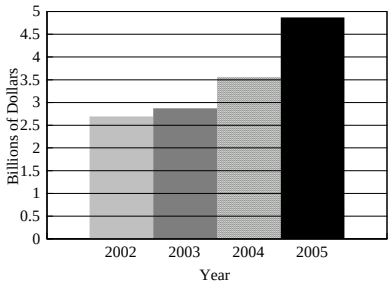
The amounts shown in Table 6 reflect the difference between the revenues collected and expenses for administering the program. These are not the amounts distributed to the schools, but an estimate of net earnings by trust. Earnings are redistributed based on criteria associated with each grant.

Table 6
Montana Department of Natural Resources and Conservation
Net Trust Revenues by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$17	$1	$2	$723	$0	$366	$1,110
ACI	80	4	122	133	15	5	359
CS	5,286	10,676	14,745	4,782	6,234	2,659	44,382
DB	53	2	22	125	1	8	211
PB	254	13	30	361	2	215	874
MTech	119	2	75	353	0	1	550
SNS	80	4	48	566	1	47	744
SRS	246	3	14	1	6	67	336
UNIV	43	21	62	0	0	0	127
Total	$6,177	$10,727	$15,119	$7,043	$6,259	$3,367	$48,693

Figure 9 displays the net revenue for FY 2002 to FY 2005. Revenue was up from $35,608,000 in FY 2004 to $48,693,000 in FY 2005. This increase will later reflect on the rate of return on total assets.

Figure 9
Montana Department of Natural Resources and Conservation
Assets FY 2002-2005



Source: Montana Department of Natural Resources and Conservation

D. Asset Value and Appreciation

Total asset value represents the sum of all asset values from each of the revenue-earning activities associated with trust lands. The detail of these estimates is found in the appendix. Results of the aggregation are found in the following tables.

Table 7 Montana Department of Natural Resources and Conservation Surface Acres by Area Office and Trust FY 2005 (Thousands of Acres)							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	9	0	0	12	0	10	31
ACI	38	0	15	3	4	3	63
CS	976	961	1,913	227	381	174	4,632
DB	23	0	4	9	0	1	36
PB	100	2	14	41	0	31	187
MTech	26	0	19	11	0	4	59
SNS	31	1	18	10	0	4	63
SRS	47	0	11	1	3	5	68
UNIV	4	3	9	0	0	2	19
Total	1,253	967	2,003	315	388	234	5,159

Table 7 shows the total surface acreage by land office and trust. This information was used to prorate assets when they could not be directly allocated from revenue or other data. No adjustments were made to the acreage distribution table this year.

Table 8 shows acreage by land office and revenue-generating activity. The largest share of trust lands, both surface and subsurface (mineral), is in the Northeastern Land Office (NELO).

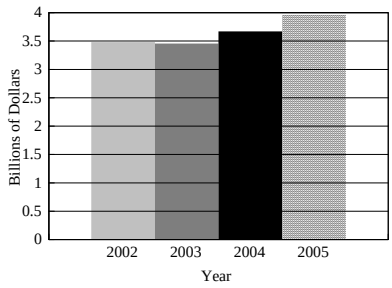
Table 8 Montana Department of Natural Resources and Conservation Classified Acres by Land Office and Bureau FY 2005 (Thousands of Acres)							
	Land Office						
Bureau	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
Agriculture	124	61	364	1	19	1	570
Grazing	1,083	9,906	1,637	16	367	81	4,089
Forest	31	0	1	296	0	151	479
Minerals	1,761	1,020	2,439	354	444	283	6,302
Real Estate	15	0	1	2	2	1	21
Total Surface	1,253	967	2,003	315	388	234	5,159

The asset value for the lands in each region by trust is shown in Table 9. This asset value is based on all sources and adjusted for possible use conflicts. The asset values for minerals have been added to the surface asset values, since there is little use conflict. Some mineral values occur where there is no

surface ownership (4 to 6 percent on average). Mineral values are combined into the surface values in all tables.

Table 9 Montana Department of Natural Resources and Conservation Asset Value by Land Office and Trust FY 2005 (Thousands of Dollars)							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$7,927	$0	$0	$12,938	$0	$6,632	$27,497
ACI	22,800	291	11,227	3,487	1,969	1,596	41,370
CS	724,237	674,926	1,668,361	223,171	236,270	76,813	3,603,779
DB	14,250	0	3,450	9,161	0	342	27,203
PB	63,674	845	8,581	40,600	0	12,900	126,601
MTech	21,056	138	13,428	12,126	0	1,237	47,985
SNS	16,777	400	12,720	9,747	0	1,801	41,444
SRS	19,692	85	6,776	1,673	1,637	2,590	32,453
UNIV	2,780	2,770	7,044	295	256	530	13,675
Total	$893,193	$679,456	$1,731,588	$313,197	$240,131	$104,443	$3,962,008

Figure 10
Montana Department of Natural Resources and Conservation
Assets FY 2002-2005



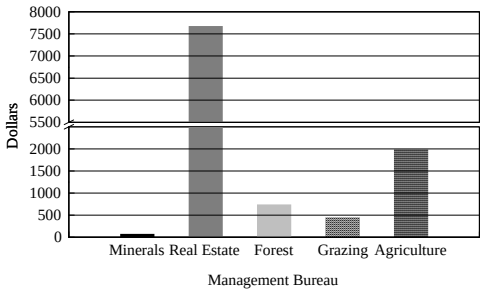
Source: Montana Department of Natural Resources and Conservation

In the case of minerals, a discounted reserve value based on current market conditions is used since the mineral estate is largely subsurface and has few other marketable values. If reserve estimates are not available, a capitalized value is used. Real Estate Management Bureau lands are largely valued through appraisals that consider not only the specific use associated with the lease, but other market valuations. Agricultural land valuations are based on the "2000 Agricultural Lands Appraisal" done by the Montana Department of Revenue for the purpose of assessing property tax on agricultural properties. Each year these estimates are updated to reflect changes in the market for agricultural lands. The method used in the original study capitalized the agricultural values of the land. Finally, timber appreciation is based on the method identified in MCA 77-1-225, but without the averaging over time. Appreciation is distributed to each land office and trust based on a weighted average of the acreage in each "source."

Asset values continue to grow primarily because of the increase in resource prices and, in the case of agriculture, because of an increase in production due to better growing conditions. Figure 10 compares assets for FY 2002 through

FY 2005. With the increase in resource prices, this year's asset value has increased by nearly 8 percent over FY 2004.

Figure 11
Montana Department of Natural Resources and Conservation
Average Asset Value per Acre by Management Bureau



Source: Montana Department of Natural Resources and Conservation

Figure 11 displays the average asset value per acre by management bureau. The comparatively large asset value per acre for Real Estate ($7,687) is the result of the substantial proportion of the Real Estate acreage contained in the high value per acre in the cabin site program. The comparatively low value for Minerals ($76) is a result of the large number of acres that have not been identified as containing commercial mineral values. Forestry, Agriculture and Grazing have per-acre values of $743, $1,986, and $449, respectively. Because of the higher resource prices, all of the asset values per acre for all bureaus have increased from FY 2004 levels.

Total net revenue is from all sources: timber, minerals, real estate and agriculture. Revenue is allocated by trust and land office.

Table 10
Montana Department of Natural Resources and Conservation
Total Return by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$336	$1	$2	$1,027	$0	$540	$1,906
ACI	831	20	832	214	84	41	2,023
CS	27,881	45,991	103,701	10,013	13,526	4,381	205,494
DB	517	2	188	340	1	17	1,065
PB	2,219	53	333	1,309	2	515	4,432
MTech	808	10	932	645	0	29	2,424
SNS	703	28	663	795	1	90	2,279
SRS	937	8	341	39	59	130	1,515
UNIV	155	145	572	7	12	12	903
Total	$34,388	$46,260	$107,566	$14,389	$13,685	$5,755	$222,041

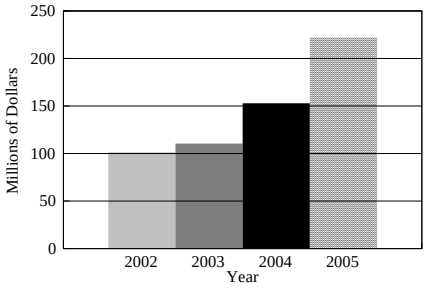
The total return shown in Table 10 includes net revenue and an asset appreciation value when appropriate. In many cases, appreciation of the asset exceeds the direct earnings of the asset. Both values are summed up in the total return.

This year's total return is larger than last year's, reflecting higher prices and increased volumes sold for nearly all resources. This year's net revenue is over $13 million higher than last year's.

Figure 12 portrays the return on assets for FY 2002 - FY 2005. The return on assets is higher in FY 2005 because of the large increase in resource prices and the increased appreciation associated with higher valued resources.

Table 11 shows the rate of return on assets for all trust lands. The total return statewide is 5.6 percent. Generally, areas with the highest mineral values have the highest rates of return. Unusually high rates of return are often indicative of a one-time occurrence or windfall. The overall distribution of assets tends to be more accurate than the detail distribution, which depends heavily on land ownership patterns.

Figure 12
Montana Department of Natural Resources and Conservation
Return on Assets 2002 - 2005



Source: Montana Department of Natural Resources and Conservaton

Table 11
Montana Department of Natural Resources and Conservation
Rate of Return on Assets by Land Office and Trust
FY 2005

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Average**
ACB	4.24%	0.00%	0.00%	7.94%	0.00%	8.14%	6.93%
ACI	3.65%	6.85%	7.41%	6.14%	4.27%	2.57%	4.89%
CS	3.85%	6.81%	6.22%	4.49%	5.72%	5.70%	5.70%
DB	3.63%	0.00%	5.45%	3.71%	0.00%	5.04%	3.92%
PB	3.49%	6.31%	3.89%	3.22%	0.00%	3.99%	3.50%
MTech	3.84%	7.30%	6.94%	5.32%	0.00%	2.37%	5.05%
SNS	4.19%	7.06%	5.21%	8.15%	0.00%	4.97%	5.50%
SRS	4.76%	9.57%	5.04%	2.36%	3.62%	5.03%	4.67%
UNIV	5.56%	5.25%	8.12%	2.30%	4.51%	2.25%	6.60%
Average	3.85%	6.81%	6.21%	4.59%	5.70%	5.51%	5.60%

This year's rate of return on assets is 37 percent higher than last year's, primarily due to increased resource prices. Higher prices increased both the net revenue contribution to total assets and the estimated appreciation associated with those activities yielding higher returns.

IV. SUMMARY

Table 12 shows the returns based on revenue and total asset values by revenue source. A large part of the return is from appreciation and not net revenue. The rate of return from revenue is 1.23 percent of the asset value. This is higher than last year's return from revenue of 0.97 percent. The overall rate of return on assets is 5.6 percent, reflecting the additional values from land appreciation as well as the increase in net revenue. This year's rate of return is greater than 1 percent higher than last year's return of 4.2 percent. The overall rate of return is up by 33 percent over last year, reflecting the much higher resource prices in FY 2005.

Table 12
Montana Department of Natural Resources and Conservation
Trust Returns by Net Revenue and Total Return[5]
FY 2005 (Thousands of Dollars)

Source	Net Revenue	% of Assets	Appreciation	% of Assets	Total Return	% of Assets
Agriculture	$10,588	0.38%	$110,039*	3.92%	$134,927*	4.81%
Grazing	3,529	0.56%	36,680*	5.78%	44,976*	7.09%
Forests	9,084	2.54%	8,503*	2.37%	17,667*	4.9%
Minerals	22,773	4.79%	97,805	20.55%	120,579	25.3%
Real Estate	2,689	1.64%	5,071*	3.09%	7,778*	4.7%
Total	$48,693	1.23%	$173,348**	4.38%	$222,041**	5.6%

*Includes minerals and/or other bureau returns

** In order to avoid double counting, the total includes Ag. & Grazing, Forests, and Real Estate values only.

[5] Trust resources are not managed in the same manner as privately held resources. In addition to providing revenue, other social and political issues are considered in most economic decisions associated with managing trust assets. Consequently, evaluating trust performance solely on the basis of the rate of return without considering all of the goals and objectives of trust asset management could lead to inaccurate conclusions about the "financial" management of trust assets.

Return on Asset Value by Trust and Land Office for Classified Forest Lands
(MCA 77-1-223 - 225)
FY 2005

This section fulfills the requirements of MCA 77-1-223 – 225, which stipulates that each year the State Board of Land Commissioners will provide a report based on a specific methodology identifying the average return on revenue to trust beneficiaries from Classified Forest Lands identified as class 2 trust lands[6] in MCA 77-4-401. The report must include for each beneficiary:

1. The total acreage of forest land held in trust;
2. A summary of the asset value for the forested lands held in trust;
3. A calculation of the average return from revenue on the asset value for the forested tracts held in trust; and
4. A listing by each DNRC land office of the total forested acreage administered for the trust beneficiary and a calculation for the average return from revenue on asset value for lands designated to the trust beneficiary.

Classified Forest Lands

The amount and distribution of Classified Forest Land acres used for this section of the report differs from those shown in Table A -1 in the Appendix because it only includes "classified forest land." Production of timber from lands not classified as forest land is not included in this report; consequently, no revenue earned from timber in the SLO or ELO is included in this section of the report. The acres identified in this section of the report are identical to acres in the FY 2004 report.

Table FOR – 1
Montana Department of Natural Resources and Conservation
Total Net Classified Forested Land Acres by Trust and Land Office

	Land Office				
Trust	**CLO**	**NELO**	**NWLO**	**SWLO**	**Total**
ACB	509		11,818	7,944	20,271
ACI			3,354	2,069	5,423
CS	9,511	19	192,784	79,002	281,316
DB	502		8,309	400	9,211
PB	2,371		38,575	26,366	67,312
MTech	1,120		9,818	2,556	13,494
SNS	540		9,366	3,506	13,412
SRS	7,299		1,626	4,488	13,413
UNIV			155	322	477
Total	21,852	19	275,805	126,654	424,329

A comparison of the Classified Forest Lands and all trust lands is given in Table FOR - 2. The land distribution by trust on "classified forests" differs considerably from the distribution of land on all trust lands. This is true for the state in total and for the individual land offices. For example, the Common School Trust accounts for about 90 percent of the total trust

[6] The methodology used in this section of the report is consistent with the methodology used in previous reports. For detailed methodology, refer to the 2000 "Return on Assets Report."

lands in the state, but only accounts for 66 percent of the Classified Forest Lands and less than 44 percent of the Classified Forest Land in the Central Land Office (CLO). Public Buildings constitute 3.6 percent of all trust land but accounts for nearly 16 percent of Classified Forest Trust Land. The result of these differences is that contributions to revenue from Classified Forest Land are likely to differ from revenue contributions from all trust land.

Table FOR – 2
Montana Department of Natural Resources and Conservation
A Comparison of Land Distribution Between Trusts
on Classified Forest Lands and All Trust Lands

	CLO		NWLO		SWLO		Total	
Trust	**% of CLO CF***	**% of All Trust land**	**% of NWLO CF***	**% of All Trust land**	**% of SWLO CF***	**% of All Trust land**	**% of All CF***	**% of All Trust land**
ACB	2.3%	0.8%	4.3%	3.8%	6.3%	4.3%	4.8%	0.6%
ACI		3.3%	1.2%	1.0%	1.6%	1.3%	1.3%	1.2%
CS	43.5%	76.3%	69.9%	71.8%	62.4%	74.7%	66.3%	89.8%
DB	2.3%	2.0%	3.0%	2.9%	0.3%	0.4%	2.2%	0.7%
PB	10.9%	8.6%	14.0%	13.1%	20.8%	12.9%	15.9%	3.6%
MTech	5.1%	2.1%	3.6%	3.5%	2.0%	1.7%	3.2%	1.1%
SRS	2.5%	2.7%	3.4%	3.2%	2.8%	1.7%	3.2%	1.2%
SNS	33.4%	4.0%	0.6%	0.3%	3.5%	2.1%	3.2%	1.3%
UNIV		0.3%	0.1%		0.3%	0.9%	0.1%	0.4%

* Classified Forest

The asset value for classified forest land is given in Table FOR - 3. These estimates of asset value were derived using procedures identified in Title 15, Chapter 44, Part 1.

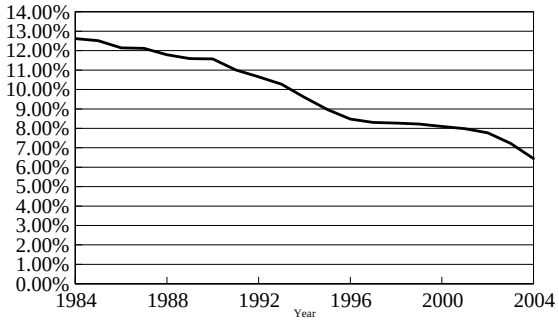
Table FOR – 3
Montana Department of Natural Resources and Conservation
Average Total Asset Value by Trust and Land Office
Net Classified Forest Land Only
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
ACB	$180,893	$8,686,731	$4,545,098	$13,412,722
ACI	0	2,359,962	778,987	3,138,949
CS	3,983,119	152,766,265	42,511,953	199,261,337
DB	396,786	6,276,653	194,876	6,868,314
PB	1,511,304	27,005,720	14,299,200	42,816,223
MTech	718,226	7,280,573	1,366,772	9,365,572
SNS	325,423	6,997,636	1,893,034	9,216,093
SRS	2,819,286	1,366,141	2,786,263	6,971,690
UNIV	0	103,624	148,763	252,388
Total	$9,935,036	$212,843,305	$68,524,945	$291,303,286

Asset values increased by nearly $19 million (3.8 percent) between FY 2004 and FY 2005. The relative distribution of asset value changed little from the previous year, primarily because the averaging of values limits the impact of changes from any single year. The increase was focused on the common school trust. Because it is the largest trust in absolute terms, the Common Schools Trust usually gains and loses value when the asset values change. The reason for the increase in trust asset value is related primarily to the increase in stumpage prices and partially to the decreasing interest rate.

Figure FOR - 1 shows the average interest rate charged by the Spokane Farm Credit Bank since 1984. This interest rate, which is the rate required by law to be used in this report, is the prime component of the capitalization rate used to compute the asset values shown in Table FOR-3. Average tax rates are also used in computing the discount rate, but the tax rate adds less than 1 percent to the interest rates. However, as the interest rates continue to fall, the average tax rate assumes more importance in the total discount rate calculation. The rate of interest has declined in recent years, however, the expectation is that this trend could reverse itself in the next few years. Increases in the "discount rate" by the Federal Reserve Bank in the last year have had a small impact on interest rates in general. If the impact grows or other factors act to increase rates, then the effect of the declining interest rates in maintaining the established asset values for forest lands will be diminished.

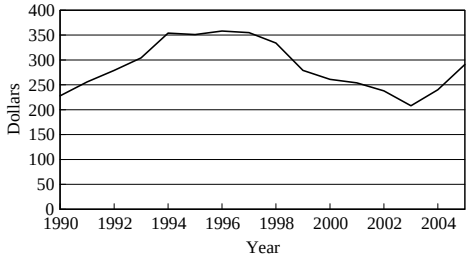
Figure FOR - 1
Farm Credit Bank Interest Rates



Source: Montana Department of Natural Resources and Conservation, Trust Land Management and the Spokane Farm Credit Bank District

Figure FOR - 2 shows the trend in stumpage fees. The stumpage rate increase that began in FY 2004 continued into FY 2005. Many of the reasons for the FY 2004 increase remain in place for FY 2005. Prices may weaken due to resolution of the tariff issue in Canada's favor. If FY 2006 prices are to remain at current levels, house construction must remain strong, Canada must show some restraint in timber exports to the United States, and overseas demand for timber needs to remain at current levels.

Figure FOR - 2
Classified Forest Stumpage
Plus Forest Improvement Fees



Source: Montana Department of Natural Resources and Conservation, Trust Lands Management Division

Appreciation is determined by the difference between the constant dollar average asset value for trust lands in the current year and the constant dollar average asset value for Classified Forest Land 10 years ago. Because of the comparatively high price received during the early- to mid-1990s and price inflation adjustments to maintain constant dollar comparisons, the asset value difference in recent years has not been much different than it was in the previous ten years. However, the recent two-year high price period and declining interest rates are increasing the average asset values estimated for the second ten-year period. In FY 2004, this interest rate and substantial stumpage price increase resulted in an increase in appreciation for the fiscal year. This same combination of events occurred again in FY 2005, causing both an increase in asset value and also a higher than average increase in appreciation.

The ten-year average gross revenue from commodity sales is shown in Table FOR - 4. The average is based on ten years of revenue through FY 2005 adjusted to 2000 dollars using the GDP price deflators published by the Bureau of Economic Analysis.

Table FOR – 4
Montana Department of Natural Resources and Conservation
Ten Year Average Gross Revenue
From Commodity Sales
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
ACB	$607	$285,564	$170,351	$456,522
ACI	2	64,449	66,684	131,135
CS	320,767	2,795,749	1,504,713	4,621,229
DB	21	174,945	6,526	181,491
PB	3,400	464,788	544,859	1,013,048
MTech	1,021	163,532	53,607	218,160
SNS	15,444	134,094	207,026	356,565
SRS	31,599	22,239	118,334	172,171
UNIV	0	5,179	7,809	12,988
Total	$372,861	$4,110,540	$2,682,909	$7,163,309

Average annual gross revenue increased by about $750,000 (12 percent) from last year's level. This is the result of losing the relatively low income from an earlier year and replacing it with higher income in the current year. The gross revenue will vary year to year depending on the relative size of the income earned in the current year compared to the inflation-adjusted income in the first year. This year's results were substantial even with the increased stumpage rates of FY 2004. Gross stumpage revenue for FY 2005 was over 50 percent higher than the gross stumpage revenue for FY 2004. If stumpage rates remain high, the increase in gross revenue should continue for the next few years

Net revenue reflects the difference between gross revenue and the State's expense of producing the various commodities available on classified forest land. Unlike last year, the ten-year average net revenue increased by over $550,000 in FY 2005 (slightly more than 17 percent).

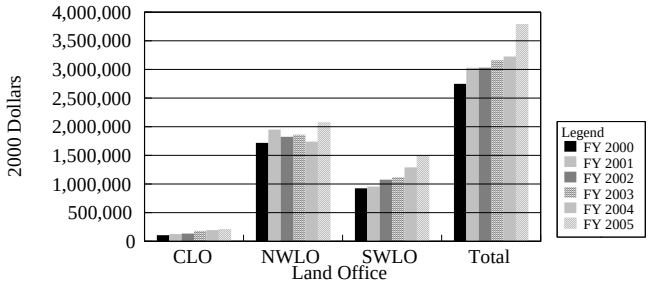
Ten-year average net revenues were up more than gross revenue. This implies that the average cost of producing the commodities has decreased relative to the increase in gross revenue. Considering the 50 percent increase in stumpage revenue alone, this is not surprising.

Table FOR – 5
Montana Department of Natural Resources and Conservation
Ten Year Average Annual Net Revenue
From Commodity Sales
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
ACB	$473	$143,621	$142,481	$286,575
ACI	1	32,793	35,358	68,152
CS	175,230	1,412,511	809,991	2,397,732
DB	11	87,571	5,597	93,179
PB	1,938	233,887	297,365	533,190
MTECH	955	81,903	29,553	112,411
SNS	14,726	67,051	110,171	191,947
SRS	17,115	11,125	65,833	94,072
UNIV	0	2,605	6,739	9,344
Total	$210,448	$2,073,067	$1,503,088	$3,786,603

Figure FOR - 3 gives a graphic comparison of ten-year average net revenue for the last five years and also demonstrates that the combined total across all regions has increased this year and that the increase is reflected in all land offices. The CLO's net revenue increased by 7.6 percent, similar to last year's increase of 7 percent. The Northwest Land Office's net revenue increased by 19 percent, which is the largest increase of all the land offices. This reflects a strong turnaround from last year, when net revenues decreased by 6 percent. The Southwestern Land Office's net revenue increased by 16.5 percent which is slightly higher than last year's 15 percent increase. The overall increase for all land offices for FY 2005 was 17 percent. This is a substantial increase from FY 2004 which had a growth rate of 2 percent.

Figure FOR - 3
Ten-Year Average Annual Net Revenue from Commodity Sales
FY 2000 to FY 2005



Source: Montana Department of Natural Resources and Conservation, Trust Lands Division

The total return on assets for FY 2005 is up compared to FY 2004. The increase in both revenue and appreciation were the result of increased prices for the last two years and the continued decline in interest rates. The reason for the higher appreciation values is the increase in timber prices for the last two years that offset some of the decrease in prices experienced over most of the previous ten years. The price increase is shown in Figure FOR - 2.

Table FOR - 6 shows the total return to assets for FY 2005. All trusts showed an increase in total return on assets compared to FY 2004. The Northwest Land Office had the largest increase in the total return on assets, followed by the Central and Southwestern Land Offices, both of which showed an increase in the total return on assets.

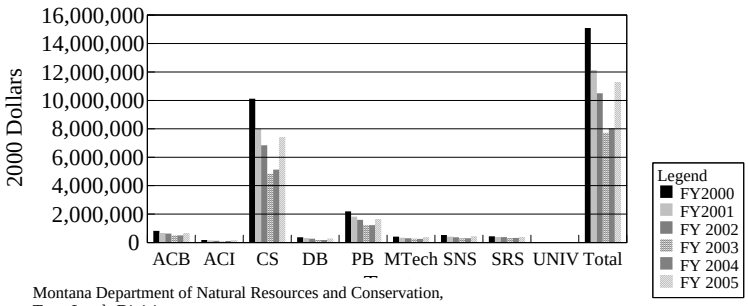
Table FOR – 6
Montana Department of Natural Resources and Conservation
Ten-Year Average Annual Return on Total Assets
By Trust and Land Office
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
ACB	$9,964	$323,682	$312,832	$646,477
ACI	0	80,979	60,271	141,251
CS	386,481	4,653,446	2,366,285	7,406,212
DB	28,301	218,864	15,703	262,868
PB	101,177	783,828	757,418	1,642,423
MTech	48,906	233,214	78,481	360,600
SNS	34,371	212,788	178,137	425,295
SRS	169,749	40,607	176,388	386,744
UNIV	0	4,680	11,863	16,543
Total	$778,949	$6,552,087	$3,957,378	$11,288,414

The total gain in return to assets from FY 2004 was $3.2 million, or an increase of 40.5 percent. This compares to last year's increase of $323,000 million, or 4.2 percent. The year's large

gain in asset value is almost entirely due to increasing appreciation. Last year's gain was primarily the result of increased revenue. The Common School Trust had the largest gain over last year.

Figure FOR - 5
Annual Return to Total Assets by Trust
FY 2000 to FY 2005



Montana Department of Natural Resources and Conservation, Trust Lands Division

From Figure FOR - 5 it is easy to see that the average return, while increasing, is still considerably below the FY 2000 level. It will take a few more years at current stumpage rates to return to the FY 2000 level because of the averaging done to determine the return. This year's large gains, however, have moved the return at a rate faster than anticipated. Part of this is due to the large amount of appreciation that resulted from the declining prices occurring after FY 1994.

The rate of return on assets by land office and by trust for FY 2005 is shown in Table FOR - 7. The overall rate of return is up 1.0 percent from last year due to the combined increases in revenue, and appreciation and the continued decrease in the interest rate in the FY 2005. The reason for the increase is that the two-year increase in stumpage combined with the decrease in stumpage after 1995 was large enough to have a significant impact on the rate of return on assets. If prices continue at their current level, the average rate of return should continue to show strong increases in the future since prices in the period 1995 to 2003 are continuously declining. All of the individual trusts showed an increase in the rate of return over FY 2004 levels.

Table FOR – 7
Montana Department of Natural Resources and Conservation
Ten-Year Average Rate of Return
On State Classified Forests
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Average**
ACB	5.5%	3.7%	6.9%	4.8%
ACI	0.0%	3.4%	7.7%	4.5%
CS	9.7%	3.0%	5.6%	3.7%
DB	7.1%	3.5%	8.1%	3.8%
PB	6.7%	2.9%	5.3%	3.8%
MTech	6.8%	3.2%	5.7%	3.9%
SNS	10.6%	3.0%	9.4%	4.6%
SRS	6.0%	3.0%	6.3%	5.5%
UNIV	0.0%	4.5%	8.0%	6.6%
Average	7.8%	3.1%	5.8%	3.9%

Regional changes, which can be quite volatile, are consistent with last year's level. All and offices showed an increase in the rate of return for FY 2005. The largest proportional increase was in the Northwest Land Office where the increase was from 2 percent in FY 2004 to 3.1 percent in FY 2005, an increase of over 50 percent.

Summary

The estimated return on assets increased in FY 2005, reflecting stumpage price increases in FY 2004 and FY 2005. The increase in stumpage prices was sufficient to make a strong movement back to the rates of return that were earned in FY 2000. Commodity sales changes are again large compared to last year, and should also have a positive impact on the return on assets in future years as additional revenue is generated from the same asset base.

Table FOR - 8 shows a comparison of the percentage of acreage owned by and net revenue earned by each trust. The acreage and earnings are generally comparable; however, the distribution of earnings has changed somewhat since last year. The Common Schools Trust is somewhat higher than last year, while Public Buildings is again proportionately lower than in FY 2004. This has allowed trusts such as the MSU trust and State Normal School trusts to obtain a larger share relative to the trust acreage. The University of Montana Trust also remains above average.

Table FOR – 8
Montana Department of Natural Resources and Conservation
Percentage of Net Revenue Earned and Net Acreage by Trust

	Net Acres	Net Revenue
Trust	**% of total**	**% of total**
ACB	4.78%	7.57%
ACI	1.28%	1.80%
CS	66.30%	63.32%
DB	2.17%	2.46%
PB	15.86%	14.08%
MTech	3.18%	2.97%
SNS	3.16%	5.07%
SRS	3.16%	2.48%
UNIV	0.11%	0.25%
Total	100.00%	100.00%

As indicated last year, the return in the long run should be fairly proportional to the acreage, although this could vary somewhat year to year due to differences in resource endowments.

The asset values derived from this methodology do not represent the market value of Montana's Classified Forest Land; they are a capitalization of a limited number of resource values into a land valuation. However, in a market situation, other values could make the market value of the land either higher or lower than estimates derived in this analysis. Other considerations not included are access, scenic values, and intense agricultural use, to name a few. In addition, other areas may contain nonmarket values that are difficult to quantify and capitalize into the land value. Thus, this analysis does not necessarily represent the market value of the land. It does, however, represent a reasonable estimate of the value and return based on the current market uses.

Appendix

This appendix contains the analysis of each resource bureau's revenue-generating activity on state trust lands. The analysis of each bureau's activity is independent of the other bureaus, but many of the analytical methods used are similar. Improved information made available has improved the accuracy of many of the available acreage numbers. Changes resulting from improved numbers have been adjusted to minimize their impact. When changes are large, tables and figures will be utilized to show the effect of the improved land information. Revision of land data is an ongoing process, so changes will continue year to year; however, future changes should be smaller than those occurring in the current year.

The table below indicates the basic method used in analyzing returns to the trusts generated by each bureau.

Montana Department of Natural Resources and Conservation
Methods Used to Value Resources by Bureau
FY 2005

Bureau	Method of Analysis	Comments
Agriculture and Grazing	Land Valuation	Adjusted for regional values.
Forest Management	Capitalization	Distributed on acreage and revenue.
Minerals	Discounted Reserve valuation and Capitalization	Distributed on acreage and Revenue.
Real Estate	Adjusted Appraisals Capitalization	Distributed on acreage.

The asset value is based on individual year information rather than multi-year averages. This results in more volatile outcomes, but the information reflects the most current return on asset information available. As shown in the table above, the approach to asset valuation has been somewhat pragmatic and was generally determined by the information available. If available, direct appraisal information was always used. Discounted values of a resource were used if a reasonable estimate of the future value of the resource was available. Capitalization was used as the last choice because of the circular nature of the method and the difficulty in identifying an appropriate capitalization rate.

Not all trusts in each land office earn revenue each year. The analysis of each of the individual trust revenue sources is analyzed independently of other trust revenue sources. This results in some of the trusts showing no return on assets by a particular bureau from their trust lands in some land offices. An area may have earnings from other sources that are not part of their classification; e.g., Real Estate may have earnings on classified forestland. For this reason, information in the main body of the report provides the most comprehensive information on trust returns.

A. CLASSIFIED TIMBER LANDS

One method used to determine the return on assets on Classified Forest Lands is prescribed in Montana law (MCA 77-1-223 and MCA 77-1-224). This analysis is included as the last section of the main report A second method, developed in this section of the appendix, is consistent with the approach used in analyzing the return on assets for other trust land resources. To maintain consistency, information derived from the second approach is used in the overall analysis of the return on assets for all trust lands.

Table A-1 shows the net classified forest acres by land office and by trust. These numbers have not changed in recent years. Because trust land management is a dynamic process, reclassifications are likely to occur which will make future Classified Forest Lands differ from the ones in Table A-1.

Table A – 1
Montana Department of Natural Resources and Conservation
Classified Forest Acres by Land Office and Trust
FY 2005

	Land Office						
Trust	**NWLO**	**SWLO**	**CLO**	**NELO**	**SLO**	**ELO**	**TOTAL**
ACB	12,212	9,073	799	0	0	0	22,085
ACI	3,423	2,044	0	0	0	0	5,466
CS	209,357	95,603	13,507	642	0	0	319,109
DB	8,584	1,176	645	0	0	0	10,405
PB	40,591	29,176	2,643	0	0	0	72,410
MTech	10,718	3,278	1,850	0	0	0	15,846
SNS	10,154	3,873	610	0	0	0	14,638
SRS	1,309	4,848	12,179	0	0	0	18,336
UNIV	364	1,708	0	0	0	0	2,072
TOTAL	296,713	150,778	32,234	642	0	0	480,368

Table A-2 shows the asset value by land office and trust on Classified Forest Lands. Capitalization of timber earnings is used to determine the asset value by land office and trust for timber. The capitalization rate used for FY 2004 is 6.44 percent, the same loan rate the Spokane Farm Credit Bank used to capitalize the value of forestlands under MCA 77-1-223-225, the legislatively mandated return on asset report. In this case, the interest rate is for the current year rather than the average of the sum of the property tax rates and interest rates for a period of five years. This rate is a lending rate, not an earnings rate, and as such is inflated, since it also includes a profit-and-risk margin for the banks. The actual earnings potential would reflect a lower rate. For FY 2005, the capitalization rate was modified to include a price adjustment to reflect recent price increases. In addition to the capitalized forest earnings, other assets that are derived from earnings of other bureaus (Minerals, Agriculture and Grazing, and Real Estate) are included as part of the asset value of classified forest land. Prorating on the basis of acreage is the method used to determine the amount of assets from other

activities allocated to classified forest land. The estimates of asset value from other activities are based on different techniques discussed under each of the activities. Use of the current year estimates rather than a multi-year average will cause more volatile changes in the asset value year to year, but will provide for a more current estimate of the asset value. Current year market interest rates contain components of risk, anticipated inflation and expected real price changes.

Table A – 2
Montana Department of Natural Resources and Conservation
Forested Land Asset Value by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$173	$0	$0	$12,566	$0	$3,788	$16,527
ACI	0	0	93	3,450	0	987	4,530
CS	3180	0	78	204,958	0	37,676	245,893
DB	166	0	0	8,833	0	192	9,191
PB	771	0	0	39,768	0	12,001	52,540
MTech	366	0	0	10,437	0	1,219	12,022
SNS	176	0	0	9,358	0	1,671	11,206
SRS	2,291	0	0	1,672	0	2,129	6,092
UNIV	0	0	0	165	0	154	319
TOTAL	$7,123	$0	$172	$291,208	$0	$59,817	$358,320

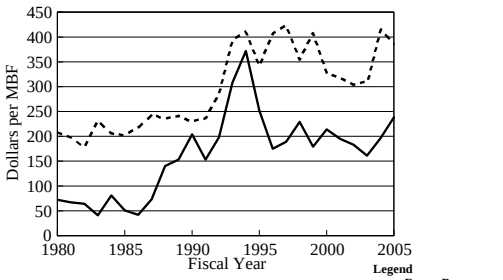
FY 2005 asset values have increased substantially over FY 2004 levels. Declining interest rates and the increase in timber prices is responsible for most of the increase in the asset value.

Table A – 3
Montana Department of Natural Resources and Conservation
Net Return on Assets on Classified Forest Lands By Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$10	$0	$0	$1,004	$0	$167	$1,181
ACI	0	0	2	197	0	24	224
CS	186	0	138	8,825	0	3,282	12,506
DB	7	0	0	322	0	5	334
PB	55	0	0	1,265	0	478	1,798
MTech	16	0	0	327	0	28	371
SNS	8	0	0	782	0	82	871
SRS	271	0	0	39	0	65	374
UNIV	0	0	0	4	0	4	7
TOTAL	$552	$0	$140	$12,764	$0	$4,134	$17,667

Table A-3 shows the net return on assets on Classified Forest Lands for FY 2005. This includes all of the net revenue available for allocation to the trust from timber sales, net revenue from minerals, real estate revenue earned on Classified Forest Lands, and appreciation. Net revenue is gross revenue less forest improvement revenue and operating costs on classified forests plus net revenues from all other bureau activities on Classified Forest Lands.

Figure A - 1
Montana Deparment of Natural Resources and Conservation
Wood prices 1980 - 2005

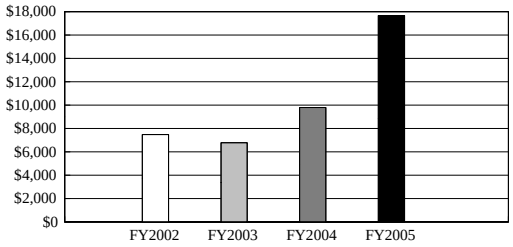


Source: Montana Department of Natural Resources and Conservation

Return has increased this year primarily due to the higher revenue received on forested lands. Figure A-1 shows the prices received on forest product sales for the last 25 years. (FI charges are not included in the stumpage prices.) The average price for stumpage went from $196/mbf in FY 2004 to $238/mbf in FY 2005. This was the result of several factors including the continued weakening of the U.S. dollar, Asian markets remaining strong (particularly Japan), and the U.S. tariff against Canadian lumber imports which may disappear in 2006.

Earnings from other bureaus are included in Table A-3. To fully identify the earnings on Classified Forest Lands and the associated return on assets, net earnings from Real Estate, Grazing, and Minerals on classified forests must also be included. These additional earnings are based on average earning per acre by trust and land offices from the "other income" sources. These earnings were prorated to the different trusts based on the amount of land owned by the trust within a particular land office boundary. The "return" includes land appreciation. This results in some areas showing a return when no economic activity has occurred. In addition to better stumpage prices, the full effects of the increased sustained yield were felt in FY 2005. The effect of an increase in both volume and value increased the return on assets by 80 percent.

Figure A - 2
Montana Department of Natural Resources and Conservation
Return on Assets from Forested Lands FY 2002 - FY 2005
(Thousands of Dollars)



Source: Montana Department of Natural Resources and Conservation

Figure A-2 shows a comparison of the estimated return on assets from forested lands for FY 2002 through FY 2005. FY 2003 is 9.4 percent lower than FY 2002. However, increased resource prices made the FY 2004 return on assets 44 percent higher than FY 2003. FY 2005 was 80 percent more than the FY 2004 return on assets

Table A-4 shows the rate of return on assets on Classified Forest Lands. This rate includes earnings from all other classified forest uses in addition to the return from timber harvests. Appreciation is also included as part of the rate of return.

Table A – 4
Montana Department of Natural Resources and Conservation
Net Rate of Return on Classified Forests by Land Office and Trust
FY 2005

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Average**
ACB	5.9%	0.0%	0.0%	8.0%	0.0%	4.4%	7.1%
ACI	0.0%	0.0%	2.3%	5.7%	0.0%	2.5%	4.9%
CS	5.8%	0.0%	17.6%	4.3%	0.0%	8.7%	5.1%
DB	4.4%	0.0%	0.0%	3.6%	0.0%	2.4%	3.6%
PB	7.2%	0.0%	0.0%	3.2%	0.0%	4.0%	3.4%
MTech	4.2%	0.0%	0.0%	3.1%	0.0%	2.3%	3.1%
SNS	4.4%	0.0%	0.0%	8.4%	0.0%	4.9%	7.8%
SRS	11.8%	0.0%	0.0%	2.3%	0.0%	3.0%	6.1%
UNIV	0.0%	0.0%	0.0%	2.3%	0.0%	2.4%	2.3%
Average	7.8%	0.0%	8.2%	4.4%	0.0%	6.9%	4.9%

Rates of return vary substantially between regions and trusts depending on earnings appreciation and the contribution of non-classified producers to earnings. Some areas with no timber activities show earnings from other sources and some from appreciation. These rates of return will vary substantially year to year, depending on the economic activity in each trust and land office. The asset value will also vary year to year depending on the real interest rate and current year activity on the forests. The average rate of return on asset value this year was 4.9 percent up from last year's rate of return of 3.3 percent. This represents an increase of slightly more than 48 percent. The rate of return on revenue was 2.5 percent.

Revenue Cost Ratio for FY 2005

Table R/C - 1 shows the FY 2005 annual summary of revenue and costs for the Forest Management Program. This year's report continues the methodology used in last year's report. It is based on information used to prepare the Return on Assets report rather than using an alternative methodology developed when the Return on Assets information was not available.

The overall revenue-cost ratio increased to 2.4 in FY 2005, which is an increase of over 31 percent above the FY 2004 ratio. The increase in revenue is due to the increase in the sustained yield and the comparatively high market prices. Gross stumpage revenue increased by $ 4.64 million and FI revenue by $0.14 million, for a total increase in revenue of $4.8 million. The NWLO made the biggest improvement in revenue by more than doubling the FY 2004 revenue amount.

Table R/C – 1
Montana Department of Natural Resources and Conservation
Revenue-Cost Ratios by Land Office
Forest Management Bureau
FY 2005

Trust	Gross Revenue	FI Revenue*	Total Revenue	Total Expense	Revenue/cost
CLO	$444,992	$15,330	$460,322	$268,833	1.71
ELO	36,692	33,890	70,582	46,191	1.53
NELO	239,229	896	240,125	119,874	2.00
NWLO	8,765,846	1,131,701	9,897,547	3,938,677	2.51
SLO	55,889	144	56,033	8,854	6.33
SWLO	4,108,984	538,894	4,647,878	1,915,049	2.43
Total	$13,651,631	$1,720,856	$15,372,487	$6,297,477	2.44

* FI revenue does not include $1,223,704 in collected revenue that was not spent on projects and is not available for distribution to the trust beneficiaries.

Costs increased slightly in FY 2005, but at a substantially lower rate than the increase in revenue. Total costs increased from $5,810,097 in FY 2004 to $6,297,477 in FY 2005 - an increase of 8.4 percent. During this same period revenues increased by 31 percent, or nearly four times as fast as expenses. Increases in costs were largely the result of increased personnel expenses.

A comparison between FY 2004 and FY 2005 revenue-cost ratios for the various land offices indicates that the ratio increased in the Northwestern and Southern land offices and decreased in the Central, Eastern, and Southwestern land offices. The revenue-cost ratio for the Northeastern Land Office was virtually identical in both years. The most significant increase was in the Northwestern Land Office, where the ratio increased from 1.31 in FY 2004 to 2.51 in FY 2005. Because the Northwest Land Office accounts for over half of the revenue, it has the largest impact on the overall ratio and is the major factor in the increase of the overall revenue/cost ratio from 1.82 in FY 2004 to 2.44 in FY 2005.

This is a cash flow analysis and not an economic one. Many of the costs experienced in the current year would be expensed against future sales in an economic analysis. Long- term program health depends on the sales developed with today's costs being less than the revenue earned on future sales.

B. REAL ESTATE LANDS

Real estate programs analyzed in this report include cabin site leases, special leases and licenses, land use licenses, and recreational use licenses. All of the programs differ substantially in information and characteristics. The Rights-of-Way and Land Sales programs are not included in the analysis, since these activities involve an exchange of assets, money for land, or a program expense. The money from land sales is deposited into the permanent fund, where it can earn money for the trust through other investments.

The land base for real estate is small relative to the land base for other bureaus. A substantial share of the money from Real Estate comes from fees on lands classified as forested, grazing and agriculture. The rate of return on many of the Real Estate activities is relatively high, however, because the revenue is dominated by cabin site leases and licenses that have a limited earnings potential (3.5 percent to 5 percent of the appraised value[7]), the overall rate of return is lower than would otherwise be expected.

Table B - 1 shows the acreage specific to Real Estate. Total acreage for FY 2005 is 21,317 acres.

Table B – 1
Montana Department of Natural Resources and Conservation
Total Net Real Estate Bureau Acres by Land Office and Trust
Classified "Other" Lands FY 2005

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	440			49		355	844
ACI	636	0	0	3	20	0	658
CS	11,612	200	1,378	1,218	2,171	275	16,855
DB	372		0	43		20	435
PB	1,693	0	0	106		26	1,825
MTech	211	0	6	201		0	418
SNS	53	0	80	51		14	198
SRS	2	0	5	0	0	60	67
UNIV	17	0	0	0	0	0	17
Total	15,037	200	1,469	1,671	2,191	750	21,317

Table B-1 shows the estimated acreage classified as "other" that is specific to real estate. Real estate programs cover a significantly larger amount of the total trust surface acreage than the lands identified in Table B-1. Programs such as the recreational use licensing program cover virtually the entire state, but occur almost entirely on lands whose primary use is under the management of one of the other Trust Land Management Division bureaus. The acreage numbers are anticipated to change yearly as new programs to enable the Trust Land Management Division to earn more money for the trusts through real estate management are implemented.

The determination of asset value in Real Estate is a combination of several techniques. In some instances, direct appraisal information is available. For example, most cabin sites have direct appraisal information available. Some Real Estate sites also have appraisal information available. For purposes of this analysis, the most recent appraisal was used. If the appraisal had not been

[7] The Land Board raised the rate to 5 percent in 1999. This rate has been "phased in" annually on all lease renewals since 1999. This increase is reflected in the Real Estate returns.

updated to a 2005 level, the appraisal was updated to an estimated FY 2005 value using the implicit price deflators published by the Bureau of Economic Analysis. This approach adjusts for general price increases but does not reflect price changes due to market changes specific to an industry. The ongoing reappraisal process recognizes industry-specific changes and results in better estimates of the market value of the land. Real Estate lands that did not have an appraisal were valued using capitalization. Over 80 percent of the asset value comes from appraisal data.

Table B – 2
Montana Department of Natural Resources and Conservation
Total Real Estate Asset Value by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$3,378	$0	$0	$376	$0	$2,728	$6,482
ACI	4,883	0	0	19	153	0	5,055
CS	89,212	1,592	10,771	9,356	16,708	2,110	129,749
DB	2,857	0	0	329	0	151	3,336
PB	13,000	0	0	814	0	197	14,011
MTech	1,622	0	46	1,546	0	1	3,215
SNS	411	0	624	390	0	111	1,536
SRS	20	0	37	0	0	461	517
UNIV	128	1	1	0	0	0	130
TOTAL	$115,511	$1,593	$11,479	$12,829	$16,860	$5,759	$164,031

Table B - 2 shows the Real Estate estimated asset value for FY 2005. The comparatively large per-acre asset value results from the higher value asset that characterizes most of the land classified as Real Estate. Cabin sites and land in proximity to urban areas is generally of higher value than land whose primary purpose is timber production, or land used for agricultural purposes. The asset estimate includes the estimated value of the minerals, agricultural, and timber uses on Real Estate lands. Both agriculture and timber values are comparatively small on Real Estate lands.

The annual return to total assets is calculated by distributing the Real Estate revenue earned on non-Real Estate lands to the program where they are earned. Revenues earned by other programs (Minerals, etc.) on Real Estate lands are then added back to the Real Estate return accrual. Finally, any estimated appreciation that occurred on Real Estate lands was added to the revenue accrual. This is the annual return to total assets shown in Table B-3. This table represents the estimated earnings (appreciation and net revenue) from all sources on Real Estate lands for FY 2005.

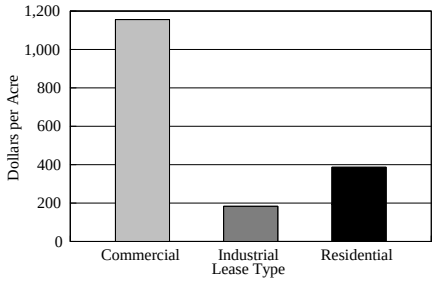
The return is generally largest on those trusts and land offices that have the most acreage. Common Schools have nearly 90 percent of the Trust Land in the state and have earned the largest share of revenue. The second largest trust, Public

Buildings, received less than 10 percent of the revenue received by Common Schools. The total return of $7,778,000 is 1.4 percent more than the return reported last year. The increase is unexpected since a substantial portion of the earnings for last year was one single transaction.

Table B – 3
Montana Department of Natural Resources and Conservation
Net Real Estate Return to Assets by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$104	$1	$2	$22	$0	$364	$494
ACI	152	2	9	16	14	1	193
CS	2,952	474	952	945	524	103	5,950
DB	88	2	2	16	1	11	121
PB	407	8	12	32	2	7	468
MTech	53	2	8	312	0	1	375
SNS	31	2	26	13	1	7	79
SRS	8	2	6	1	0	65	81
UNIV	12	1	3	0	0	0	16
TOTAL	$3,806	$496	$1,019	$1,356	$542	$559	$7,778

Figure B - 1
Montana Department of Natural Resources and Conservation
Real Estate Bureau Lease Value Per Acre
Selected Lease Types

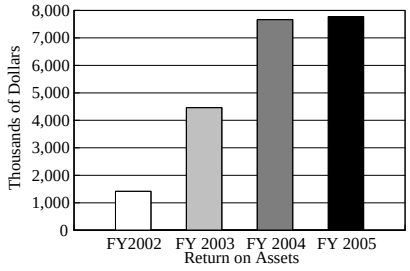


Source: Montana Department of Natural Resources and Conservation

Figure B - 1[8] shows the lease value per acre for selected types of leases. Commercial leases clearly have the highest value per acre with residential and industrial leases a distant second and third. One of the goals of the Real Estate Bureau's Programmatic Plan is to move more acreage into higher value leases and improve the overall return to assets of the REMB.

Figure B-2 shows the actual return on assets for FY 2002 through FY 2005. Compared to previous years, it is apparent that growth in the return on assets for the Real Estate Bureau slowed in FY 2005. As the Programmatic Plan is implemented, the growth rate is expected to increase.

Figure B - 2
Montana Department of Natural Resources and Conservation
Real Estate Bureau Return to Assets FY 2002 - FY 2005



Source: Montana Department of Natural Resources and Conservation

[8] Last year's Figure B – 1 has been replaced for this year because of the lack of data for a Montana housing price index. This data should be available next year so that the series can be continued.

Table B-4 presents the rate of return on the assets by land office and trust for FY 2005. The rates do not vary substantially because some of the revenues were prorated based on acreage.

Table B – 4
Montana Department of Natural Resources and Conservation
Rate of Return on Assets by Land Office and Trust
Real Estate Bureau FY 2005

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Average**
ACB	3.1%	0.0%	0.0%	5.8%	0.0%	13.4%	7.6%
ACI	3.1%	0.0%	0.0%	85.2%	8.9%	0.0%	3.8%
CS	3.3%	29.8%	8.8%	10.1%	3.1%	4.9%	4.6%
DB	3.1%	0.0%	0.0%	4.9%	0.0%	7.3%	3.6%
PB	3.1%	0.0%	0.0%	4.0%	0.0%	0.4%	3.3%
MTech	3.2%	0.0%	17.5%	20.2%	0.0%	106.5%	11.7%
SNS	7.5%	0.0%	4.1%	3.2%	0.0%	6.2%	5.1%
SRS	3.8%	0.0%	16.0%	0.0%	0.0%	14.1%	15.7%
UNIV	9.2%	10.1%	2.9%	0.0%	0.0%	0.0%	12.6%
Average	3.3%	31.1%	8.9%	10.6%	3.2%	9.7%	4.7%

The average rate of return was 4.7 percent in FY 2005. This is an 11 percent decrease from the 5.3 percent return in FY 2004. The primary reason for the decrease in the rate of return is the reduced lease value that resulted from the loss of revenue from a single large easement.

The return varied by region and trust. The overall average is usually close to the return on common school lands because common school lands dominate other trusts in terms of size. In some cases, the return is large for some land office/ trust combinations compared to the overall rate of return. This occurs because the proportion of the total value is quite small relative to the total so that the impact on the total return is small. The large return often results because another resource such as minerals or forests that contributes to the Real Estate return, resulting in a comparatively large rate of return for an individual trust within a land office.

C. AGRICULTURE AND GRAZING LANDS

The net agricultural acreage was determined from reports generated by the Trust Land Management System from data provided by the State's central system. This has made substantial difference in estimates of agricultural asset values and the total agricultural return. Agriculture and grazing land comprises the largest share of state trust surface lands, accounting for over 91 percent of all surface trust lands. Tables C - 1 and C - 2 show the total "farmed" and total "grazing" acres.

Table C – 1 Montana Department of Natural Resources and Conservation Total Farm Acres by Land Office and Trust FY 2005							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	81	0	0	0	0	7	88
ACI	191	0	1,440	3	0	0	1,635
CS	113,748	59,538	356,442	1,043	19,343	1,156	551,269
DB	544	0	833	0	0	0	1,377
PB	3,020	0	1,070	4	0	0	4,094
MTech	4,711	0	1,531	0	0	0	6,242
SNS	870	0	1,711	0	0	0	2,582
SRS	531	0	469	0	0	0	1,001
UNIV	497	709	730	25	0	59	2,019
Total	124,194	60,247	364,226	1,075	19,343	1,222	570,307

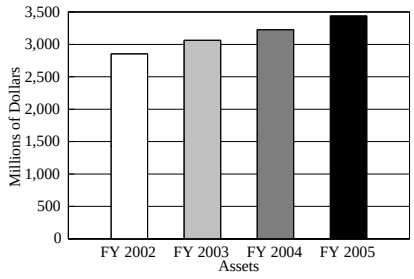
Table C – 2 Montana Department of Natural Resources and Conservation Total Grazing Acres by Land Office and Trust FY 2005							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	8,177	0	0	0	0	229	8,406
ACI	36,724	480	13,486	22	3,558	1,358	55,628
CS	837,626	901,064	1,554,695	15,142	359,154	77,347	3,745,027
DB	21,222	0	3,027	0	0	0	24,249
PB	92,750	1,524	13,075	29	0	1,562	108,939
MTech	19,331	228	17,047	320	0	40	36,967
SNS	29,483	723	15,817	0	0	42	46,064
SRS	34,330	141	11,001	0	3,249	0	48,720
UNIV	3,167	1,985	8,691	179	480	578	15,080
Total	1,082,809	906,145	1,636,839	15,692	366,441	81,156	4,089,081

The distribution of agricultural acres is essentially the same as it was last year. The majority of the assets and the return on assets for Mineral lands are included as part of the assets and return on the Agricultural and Grazing lands.

Table C – 3 Montana Department of Natural Resources and Conservation Total Net Agriculture and Grazing Assets by Land Office and Trust FY 2005 (Thousands of Dollars)							
	Land Office						
Grant	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$4,078	$0	$0	$0	$0	$117	$4,195
ACI	17,963	306	10,734	18	1,794	610	31,424
CS	627,283	692,008	1,641,034	8,873	221,291	37,042	3,227,530
DB	11,266	0	3,483	0	0	0	14,750
PB	50,563	931	9,736	22	0	702	61,953
MTech	18,751	145	12,977	144	0	18	32,035
SNS	15,864	415	12,587	0	0	19	28,886
SRS	17,479	90	7,252	0	1,654	0	26,475
UNIV	2,515	2,727	6,417	130	244	376	12,409
TOTAL	$765,762	$696,622	$1,704,219	$9,187	$224,983	$38,885	$3,439,657

Agricultural and Grazing values on state trust lands are determined separately by identifying the average Agriculture and Grazing value using estimates from the Department of Revenue, then adjusting these values to trust land use levels (e.g., lower grazing rates on trust lands compared to private lands). Finally, the estimates are regionalized based on land values identified in the "Census of Manufacturing," published by the U. S. Census Bureau. The separate Agriculture and Grazing rates were then combined based on the proportion of agriculture and grazing acres in each county. Finally, assets and returns are added from minerals and other sources; asset value on Agriculture and Grazing lands constitutes the largest share of total asset value.

Figure C - 1
Montana Deparment on Natural Resources and Conservation
Asset Values FY 2002 - FY 2005



Source: Montana Department of Natural Resources and Conservation

The total asset value on agricultural lands was $3,439,657,000 in FY 2005 compared to the estimated value in FY 2004 of $3,228,919,000. Nearly all of the increase is the result of the increase in resource values for both agriculture and other trust resources. Figure C-1 shows a comparison of the last four years. Most of the increase over the four-year period is the result of increased resource prices and a small increase in agricultural acreage. In FY 2005, however, increases in output also contributed to the increased asset value of the agricultural lands.

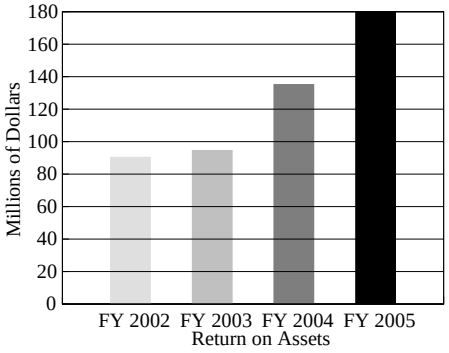
Table C – 4 shows the total return to assets on agricultural lands.

Table C – 4
Montana Department of Natural Resources and Conservation
Agriculture and Grazing Return on Assets by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$145	$0	$0	$1	$0	$8	$154
ACI	660	18	663	1	58	16	1,416
CS	22,201	44,024	91,509	226	11,803	999	170,762
DB	413	0	181	2	0	2	597
PB	1,838	60	572	4	0	29	2,503
MTech	645	8	766	6	0	0	1,426
SNS	564	27	700	1	0	1	1,292
SRS	642	6	421	0	57	0	1,126
UNIV	108	120	380	3	8	8	627
TOTAL	$27,215	$44,264	$95,193	$242	$11,925	$1,063	$179,903

The return on assets for FY 2005 was 33 percent higher compared to the FY 2004 return on assets. Figure C - 2 shows the return on assets for FY 2002 through FY 2005. The large increase in the return on assets for FY 2005 was the result of both increased prices and revenue for minerals and increased prices and output for agriculture. A prorated portion of the subsurface mineral returns are included as part of the surface return. Agriculture and grazing shows the greatest benefit from the large growth in mineral prices and revenue.

Figure C - 2
Montana Department of Natural Resources and Conserva
Return on Assets FY 2002 - FY 2005



Source: Montana Department of Natural Resources and Conservation

Table C – 5 shows the rate of return on assets. The average rate of return in FY 2004 was 4.2 percent. The average rate of return for FY 2005 was 24 percent higher at 5.2 percent. The increase in FY 2005 was due primarily to the increase in receipts from all bureaus. Similar to last year, some rates of return are very high as a result of small acreages with comparatively large appreciation.

Table C – 5 Montana Department of Natural Resources and Conservation Agriculture and Grazing Rate of Return on Assets by Land Office and Trust FY 2005							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Average**
ACB	3.6%	0.0%	0.0%	0.0%	0.0%	6.8%	3.7%
ACI	3.7%	6.0%	6.2%	2.9%	3.2%	2.6%	4.5%
CS	3.5%	6.4%	5.6%	2.5%	5.3%	2.7%	5.3%
DB	3.7%	0.0%	5.2%	32.8%	0.0%	0.0%	4.0%
PB	3.6%	6.4%	5.9%	18.3%	0.0%	4.1%	4.0%
MTech	3.4%	5.8%	5.9%	4.0%	0.0%	2.1%	4.5%
SNS	3.6%	6.5%	5.6%	0.0%	0.0%	4.5%	4.5%
SRS	3.7%	6.7%	5.8%	0.0%	3.4%	0.1%	4.3%
UNIV	4.3%	4.4%	5.9%	2.2%	3.2%	2.1%	5.1%
Average	3.6%	6.4%	5.6%	2.6%	5.3%	2.7%	5.2%

D. MINERAL LANDS

The trusts own about 6.3 million acres in mineral rights. These rights are categorized for analysis purposes as coal, oil and gas, and other minerals. Coal and oil and gas generated nearly 99 percent of the mineral resource revenue in FY 2005. The remaining 1 percent came from all other sources, mostly sand and gravel extraction. Because the extraction of different minerals is generally not mutually exclusive, the value of the minerals and the asset values of each mineral is additive. Each mineral's asset value is estimated separately and then added to achieve a total value. The subsurface values can be added to the surface values to obtain a total estimate of values for the trust. This section provides the distribution of acreages by trust and land office and utilizes this information in conjunction with earnings to develop an asset value and rate of return on mineral properties.

Tables D-1a through D-1c show the acreage associated with each of the mineral resource categories. The largest number of acres is associated with oil and gas, followed by coal, and then other minerals.

Table D – 1a
Montana Department of Natural Resources and Conservation
Total Coal Subsurface Acres by Land Office and Trust
FY 2005

Trust	CLO	ELO	NELO	NWLO	SLO	SWLO	Total
ACB	22,818		40	12,732	0	11,487	47,077
ACI	41,777	480	21,870	4,000	5,178	3,655	76,960
CS	1,382,944	943,879	2,223,585	262,068	423,572	212,493	5,448,542
DB	25,367		4,309	9,659	0	1,835	41,171
PB	136,225	1,080	18,119	40,574	0	32,312	228,310
MTech	42,704	228	26,492	12,176	0	4,667	86,267
SNS	49,461	28	19,369	10,166	0	4,516	83,540
SRS	50,729	141	12,875	1,469	3,850	9,061	78,125
UNIV	9,681	3,165	16,712	524	1,120	2,553	33,754
Total	1,761,706	948,828	2,343,372	353,368	433,720	282,580	6,123,747

Table D – 1b
Montana Department of Natural Resources and Conservation
Total Oil and Gas Subsurface Acres by Land Office and Trust
FY 2005

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	22,373			12,732	0	11,487	46,592
ACI	41,777	480	21,870	4,000	5,178	3,655	76,960
CS	1,350,477	1,014,746	2,339,728	262,172	434,190	207,222	5,608,537
DB	25,367		4,309	9,659	0	1,835	41,171
PB	92,941	1,080	5,505	40,974	0	32,312	172,812
MTech	42,704	228	26,492	12,176	0	4,667	86,267
SNS	49,461	723	15,558	10,166	0	4,516	80,424
SRS	50,457	141	8,510	1,469	3,850	9,061	73,488
UNIV	9,681	3,165	16,712	524	1,120	2,553	33,754
Total	1,685,238	1,020,390	2,438,685	353,872	444,338	277,309	6,220,006

Table D – 1c Montana Department of Natural Resources and Conservation Total Other Mineral* Subsurface Acres by Land Office and Trust FY 2005							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	20,578		40	12,660		9,740	43,017
ACI	38,262	480	16,310	3,880	5,018	3,495	67,445
CS	1,243,870	1,005,326	2,127,556	251,938	409,456	182,555	5,220,702
DB	24,132		3,680	8,667		1,475	37,955
PB	118,188	1,617	18,857	40,377		30,510	209,549
MTech	34,331	228	19,105	11,240		3,867	68,771
SNS	42,237	723	21,401	10,125		4,176	78,662
SRS	48,527	141	12,755	1,469	3,249	5,942	72,083
UNIV	5,026	2,694	10,061	364	480	1,917	20,541
Total	1,575,151	1,011,036	2,229,765	340,719	418,203	243,677	5,818,723
* Includes all minerals except coal, oil, and gas							

Coal, oil and gas asset values are calculated by first estimating known reserves. The asset value is estimated by multiplying the current price times the estimated production for the life of the field or deposit; estimating a net revenue based on historic industry costs; discounting this net revenue stream back to its present value; and using known reserves and recent production levels to determine the duration of production.

In estimating reserves on coal and, in particular, oil and gas, the reserves vary with the price. As the price increases, additional oil, gas, and coal become economical to produce, and the size of the reserve estimate increases. The converse is true if prices fall. For the purpose of this analysis, it was assumed:

1. The current price will hold throughout the entire production of the field;

2. Only known reserves, those based upon current producing fields, are used in the estimate;

3. Production will continue at its current rate until the estimated reserves are depleted.

The federal government periodically publishes known mineral reserve estimates for each state. This reserve estimate was used as the basis of estimating the asset value for minerals in the State of Montana. The analysis assumes that, on average, the occurrence, type, and volume of reserves is the same on state-owned trust lands as the rest of the state. The method used to estimate the asset value for each different mineral category is discussed below. A summary of the mineral commodity asset values is shown in Table D-2.

New acreage estimates have not changed the total acres to the extent that they did for Agriculture and Real Estate. While acreage changes will have a small effect, other factors such as price changes have a much greater influence on changes to asset values and rates of return. Table D - 2 shows the asset value for all minerals.

Table D – 2
Montana Department of Natural Resources and Conservation
Total Mineral Asset Value by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$573	$0	$0	$9	$0	$7	$588
ACI	1,070	76	2,228	3	223	2	3,602
CS	30,946	151,181	253,189	173	20,161	125	455,775
DB	650	0	440	6	0	1	1,097
PB	2,399	162	595	28	0	21	3,205
MTech	1,089	36	2,700	8	0	3	3,836
SNS	1,265	76	1,616	7	0	3	2,967
SRS	1,294	22	876	1	180	4	2,377
UNIV	245	473	1,699	0	40	1	2,459
Total	$39,532	$152,025	$263,345	$234	$20,604	$167	$475,906

For oil and gas, asset estimates are made using the estimated profit from oil production to determine net industry rate profit. The profit level is obtained from data published by the Energy Information Administration and the U. S. Geological Survey. The asset value of the field is determined by first multiplying the rate of profit by the Montana price per barrel and multiplying this amount by the current production level extended until the field is depleted. This revenue stream is then discounted back at 4 percent to its present value. This number is the estimated asset value. A similar approach is used to determine the asset value of gas. The value for oil and gas is relatively large because of the relatively large profit margins.

A similar method is used for coal but, because of a lower profit margin, the annual value of the income stream is much smaller[9]. However, the large size of the coal reserves extends the production period and increases the asset value. In addition, national forecasts predict a decline in the price of coal into the foreseeable future. Environmental restrictions make it more difficult to utilize coal to produce energy rather than using other energy-producing minerals. Another limit on Montana's coal reserve estimates is that Montana has large quantities of relatively low-grade coal, which increases energy production. For

[9] The smaller income stream to producers has little short-term impact on the revenue received by the state for its coal royalties. The lower income level has a significant impact on the asset value of the reserves.

these reasons, the time period used to estimate the asset value of coal reserves was limited to 30 years.

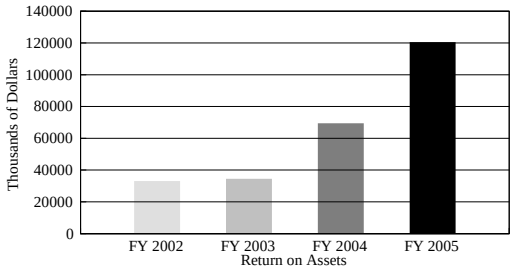
Assets for other minerals (mostly sand and gravel) were estimated by capitalizing the current level of production using a 5.8 percent average corporate bond yield rate.

Table D – 3
Montana Department of Natural Resources and Conservation
All Mineral Return to Assets by Land Office and Trust
FY 2005 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$135	$0	$0	$1	$0	$2	$137
ACI	260	12	576	0	32	0	881
CS	9,428	32,345	65,791	64	8,130	20	115,778
DB	152	0	103	1	0	0	256
PB	593	29	151	27	0	3	802
MTech	255	6	642	2	0	0	904
SNS	296	18	379	1	0	0	694
SRS	324	3	204	0	23	2	556
UNIV	59	79	427	0	7	0	572
TOTAL	$11,501	$32,492	$68,272	$95	$8,192	$27	$120,579

The return on assets for FY 2005 is shown in Table D – 3. The return from mineral lands nearly doubled for a second year in a row. The FY 2004 return was $69,487,000 compared to $120,579,000 in FY 2005. The increase is due primarily to an increase in resource values, particularly oil and gas prices; however, increased production also improved the return. The higher prices also resulted in higher net revenue from minerals which increased from $15,170,000 in FY 2004 to $22,773,000 in FY 2005.

Figure D - 1
Montana Department of Natural Resources and Conservation
Return on Assets - Minerals



Source: Montana Department of Natural Resources and Conservation

Figure D - 1 and Table D - 4 show the return on total assets for FY 2002 though FY 2005. The return is up strongly again in FY 2005. The rate of return on assets is also up strongly in FY 2005. The rate of 25.3 percent in FY 2005 is up 7.7 percent over the rate in FY 2004. The reason that the rate of return did not double like the total return is that the asset value increased strongly in FY 2005 also. By a large margin, minerals have the largest overall rate of return.

Table D – 4 Montana Department of Natural Resources and Conservation Rate of Return to Mineral Assets by Land Office and Trust FY 2005							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Average**
ACB	23.5%	0.0%	1.0%	10.2%	0.0%	24.8%	23.3%
ACI	24.3%	16.2%	25.8%	8.5%	14.4%	8.8%	24.5%
CS	30.5%	21.4%	26.0%	36.9%	40.3%	15.8%	25.4%
DB	23.4%	0.0%	23.3%	16.4%	0.0%	23.3%	23.3%
PB	24.7%	17.6%	25.3%	95.7%	0.0%	12.3%	25.0%
MTech	23.4%	15.3%	23.8%	21.8%	0.0%	8.5%	23.6%
SNS	23.4%	24.1%	23.4%	8.9%	0.0%	8.3%	23.4%
SRS	25.0%	15.3%	23.3%	3.6%	12.8%	40.3%	23.4%
UNIV	24.0%	16.6%	25.2%	8.8%	16.5%	8.9%	23.2%
Average	29.1%	21.4%	25.9%	40.5%	39.8%	16.0%	25.3%

E. EMPLOYEE DISTRIBUTION AND EXPENSES

The allocation of expenses between land offices is based on several factors, The most important factor is the distribution of employment between the land offices. Table E - 1 shows the distribution of employees between land offices. Headquarters or regional administrative employees are allocated based on the distribution of regional employees. Fractional employment represents employees who work in one or more bureaus or land offices. The table does not include employees funded through either FI or general fund monies. Total positions allocated are 129, although the table reflects only positions "filled" throughout the year.

Table E – 1 Montana Department of Natural Resources and Conservation Employment Allocated between Bureaus and Land Offices FY 2004							
	Land Office						
Bureau	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
Forest Mgmt.	3.74	1.00	0.93	41.50	0.00	20.28	67.45
Ag &Grazing	7.20	5.04	9.72	0.00	2.16	0.00	24.11
Real Estate	2.92	0.00	0.49	10.22	1.95	3.89	19.46
Minerals	1.41	2.82	4.23	0.00	1.41	0.00	9.88
Total	15.26	8.86	15.37	51.71	5.52	24..17	120.90

Table E – 2 on the following page shows the total acres by bureau, land office, and trust.

Table E–2
Montana Department of Natural Resources and Conservation
Total Acres by Bureau and Land Office and Trust

Land Office		ACB	ACI	CS	DB	PB	MTech	SNS	SRS	UNIV	Total
NWLO	Ag & Grazing	-	-	14,387	-	-	320	-	-	-	14,707
	Forest Mgmt.	12,212	3,398	209,153	8,584	40,591	10,718	10,154	1,309	160	296,247
	Minerals*	12,732	4,000	262,172	9,659	40,974	12,176	10,166	1,469	524	353,872
	Real Estate	49	3	1,218	43	106	201	51	-	-	1,671
SWLO	Ag & Grazing	236	1,451	78,353	-	1,457	-	40	-	209	81,746
	Forest Mgmt.	9,073	2,137	95,314	1,176	29,029	3,827	3,871	4,928	1,280	150,636
	Minerals*	11,487	3,655	207,222	1,835	32,312	4,667	4,516	9,061	2,553	277,309
	Real Estate	355	-	275	20	26	-	14	60	-	750
CLO	Ag & Grazing	8,258	36,922	866,159	21,758	95,242	24,045	30,324	34,532	3,663	1,120,906
	Forest Mgmt.	800	-	13,402	640	2,564	1,267	585	11,270	-	31,028
	Minerals*	22,373	41,777	1,350,477	25,367	92,941	42,704	49,461	50,457	9,681	1,685,238
	Real Estate	440	636	11,612	372	1,693	211	53	2	17	15,035
NELO	Ag & Grazing	-	14,926	1,996,077	3,860	14,301	18,579	17,529	11,470	9,420	2,086,663
	Forest Mgmt.	-	-	800	-	-	-	-	-	-	800
	Minerals*	-	21,870	2,339,728	4,309	3,505	26,492	15,505	8,510	16,712	2,438,685
	Real Estate	-	-	1,328	-	-	6	80	5	0	1,469
SLO	Ag & Grazing	-	3,556	379,351	-	-	-	-	3,249	480	386,635
	Forest Mgmt.	-	-	-	-	-	-	-	-	-	-
	Minerals*	-	5,178	434,190	-	-	-	-	3,850	1,120	444,338
	Real Estate	-	20	2,171	-	-	-	-	-	-	2,191
ELO	Ag & Grazing	-	480	962,150	-	1,524	228	723	617	2,694	968,416
	Forest Mgmt.	-	-	-	-	-	-	-	-	-	-
	Minerals*	-	480	1,014,746	-	1,080	228	723	141	3,165	1,020,390
	Real Estate	-	-	200	-	-	-	-	-	-	200
Total	Ag & Grazing	8,496	57,335	4,296,977	25,619	112,525	43,172	48,347	49,868	16,468	4,659,074
	Forest Mgmt.	22,085	5,535	318,668	10,400	72,151	15,813	14,611	18,002	1,440	478,711
	Minerals*	46,592	76,960	5,608,537	41,172	172,812	86,267	80,424	73,488	33,754	6,220,006
	Real Estate	844	658	16,855	435	1,825	418	198	67	17	21,317

* Mineral acres are based on the oil and gas acres, which comprise the most mineral subsurface acres.